PART IV

Section 1-C (i)

STATUTORY RULES AND NOTIFICATIONS ISSUED BY THE CENTRAL GOVERNMENT AND REPUBLISHED BY THIS GOVERNMENT

NOTIFICATION.

No. LAW 65 LCR 62, dated Bangalore, 17th October 1962.

Ordered that the accompanying Notification No. G.S.R. 1238, dated the 8th September 1962, of the Ministry of Transport and Communications (Departments of Civil Communications and Civil Aviation), amending the Indian Aircraft Rules, 1937 which has been published in the *Gazette of India*, Part II, Section 3, sub-section (i) dated the 15th September 1962 be republished in the *Mysore Gazette*, for general information.

By Order and in the name of the Governor of Mysore,

S. SRIPADARAJ,
Under Secy. to Govt., L.D.

GOVERNMENT OF INDIA

MINISTRY OF TRANSPORT AND COMMUNICATIONS

(Departments of Communications and Civil Aviation)

New Delhi, the 8th September 1962.

G.S.R. 1238.—In exercise of the powers conferred by section 5 of the Indian Aircraft Act, 1934 (22 of 1934), the Central Government hereby makes the following rules further to amend the Indian Aircraft Rules, 1937, the same

having been previously published as required by section 14 of the said Act, namely:—

1. These rules may be called the Indian Aircraft (Amendment) Rules, 1962.

2. In the Indian Aircraft Rules, 1937.—

(1) For sub-rule (i) of rule 3, the following sub-rule shall be substituted, namely:—

"3. *Definition and Interpretation.*—(1) In these rules unless there is anything repugnant in the subject or context,—

(1) "Aerial work aircraft" means an aircraft used for an industrial or commercial purpose or any other remunerative purpose but does not include an aircraft used for public transport;

(2) "aerodrome" means any definite or limited ground or water area intended to be used, either wholly or in part, for the landing or departure of aircraft, and includes all buildings, sheds, vessels, piers and other structures thereon or appertain ng thereto;

(3) "aerodrome light" means any light exhibited at an aerodrome for the purpose of assisting the navigation or manoeuvres of an aircraft or of signalling to or from an aircraft;

(4) "Aerodyne" means an aircraft whose support in flight is derived dynamically from the reaction on surfaces in motion relative to the air, and includes all aeroplanes, helicopters, gyroplanes, gliders and kites;

(5) "Aeroplane" means a mechanically driven aerodyne supported by aerodynamic reactions on surfaces remaining xed under the same conditions of flight;

(6) "Aerostat" means an aircraft supported in the air statically and includes all airships and balloons;

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(7) "Aircraft" means any machine which can derive support in the atmosphere from reactions of the air, and includes balloons whether fixed or free, airships, kites, gliders and flying machines;

(8) "Airship" means a mechanically driven aerostat having means of directional control;

(9) "air transport service" means a service for the transport by air of persons, mails or any other thing, animate or inanimate, for any kind of remuneration whatsoever whether such service consists of a single flight or a series of flights;

10) "Amphibian" means an aeroplane capable normally of taking off from and alighting on either land or a solid platform or water;

11) "Balloon" means an aerostat not provided with mechanical means of propulsion;

12) "Class Rating" shall comprise;
(a) Single-engine, land;
(b) Single-engine, sea;
(c) Multi-engine, land;
(d) Multi-engine, sea;

13) "contracting State" means any State which is for the time being a party to the Convention on International Civil Aviation concluded at Chicago on December 7, 1944, and any amendment which may be made thereto under the provisions of Article 94 thereof;

(14) "co-pilot" means a licensed pilot serving in any piloting capacity other than as pilot-in-command but excluding a pilot who is onboard the aircraft for the sole purpose of receiving flight instruction;

(15) "Corporation" means either of the Corporations established under the Air Corporations Act, 1953 (27 of 1953);

(16) "course" or "heading" means the direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (True, Magnetic or Compass);

(17) "dangerous goods" means any goods, whether explosives or not, which by reason of their nature are likely to endanger the safety of aircraft or persons or things on board the aircraft;

(18) "Director-General" means Director-General of Civil Aviation;

(19) "dual flight time" means flight time during which a person is receiving flight instruction from a pilot on board the aircraft;

(20) "export" means taking out of India;

(21) "flight crew member" means a licensed crew member charged with duties essential to the operation of an aircraft during flight time;

(22) "flight time" means the total flight time from the moment the aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest at the end of the flight;

NOTE.—Flight time as herein defined is synonymous with the term "block to block" time, or "chock to chock" time in general usage which is measured from the time the aircraft moves from the loading point until it stops at the unloading point;

(23) "flight time in a glider" means the total time occupied in flight, whether being towed or not, from the moment the glider first moves for the purpose of taking off until the moment it comes to rest at the end of the flight;

(24) "flight time in free flight" includes flight time in a glider when it is not being towed;

(25) "flying machine" means a mechanically driven aerodyne, and includes all aeroplanes, helicopters and gyroplanes;

(26) "Glider" means an aerodyne supported in flight by aerodynamic reactions on surfaces remaining fixed under the same conditions of flight and not provided with mechanical means of propulsion;

(27) "Government aerodrome" means an aerodrome which is maintained by or on behalf of the Government;

(28) "Helicopter" means a heavier-than-air aircraft supported in flight by the reactions of the air on one or more power driven rotors on substantially vertical axis;

(29) "Import" means bringing into India ;

(30) "instrument time" means the instrument flight time or the instrument ground time ;

(31) "instrument flight time" means the time during which a pilot is piloting an aircraft solely by reference to instruments and without external reference points;

(32) "instrument ground time" means the time during which a pilot is practising, on the ground, simulated instrument flight on a mechanical device approved by the Director-General;

(33) "landing area" means that part of an aerodrome reserved for the departure or landing of aircraft;

(34) "making way" an aircraft is said to be "making way" when, under way in the air or on the surface of the water, it has a velocity relative to the air or water respectively;

(35) "military aircraft" includes naval, military and air force aircraft, and every aircraft commanded by a person in naval. military or air force service detailed for the purpose;

(36) "normal flight" means flight comprising climbing, horizontal flight, turning and descending, provided however, that it does not entail abrupt variations in height, or in the attitude of the aircraft ;

(37) "on the surface of the water" an aircraft is deemed to be "on the surface of the water" so long as any portion of it is in contact with the water;

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(38) "operator" means a person, organisation or enterprise engaged in or offering to engage in aircraft operation;

(39) "passenger aircraft", "mail aircraft" and "goods aircraft" means aircraft which effect public transport of passengers mails or goods respectively;

(40) "personnel" in relation to any aircraft means the person in charge, the pilot, the navigator, the engineer, and all other members of the crew;

(41) "petroleum in bulk" means petroleum contained in receptacle exceeding 900 litres in capacity;

(42) "Pilot-in-Command" means the pilot responsible for the operation and safety of the aircraft during flight time;

(43) "Private aircraft" means all aircraft other than aerial work aircraft or public transport aircraft;

(44) "prohibited area" means an area over which the navigation of aircraft is prohibited under rule 12;

(45) "public transport" means all carriage of persons or things effected by aircraft a for remuneration of any nature whatsoever, and all carriage of persons or things effected by aircraft without such remuneration if the carriage is effected by an air transport undertaking;

(46) "public transport aircraft" means an aircraft which effect public transport;

(47) "rating" means an authorisation entered on a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence;

(48) "rendering a licence valid" means the action taken as an alternative to issuing a licence, in accepting a licence, issued by any other Contracting State as the equivalent of an Indian licence;

(49) "Scheduled air transport service" shall have the same meaning as in the Air Corporations Act, 1953 (27 of 1953);

(50) "Seaplane" means an aeroplane capable normally of taking off from and alighting solely on water;

(51) "solo flight time" means flight time during which a pilot is the sole occupant of an aircraft;

(52) "State aircraft" includes military aircraft and aircraft exclusively employed in the service of the Government, such as posts, customs, police;

(53) "subsequent aircraft" means an aircraft which is constructed in accordance with the design and specification of a type of aircraft, which has been approved or accepted by the Central Government for the issue of a certificate of airworthiness;

(54) "take off" includes all the successive positions of an aerodyne from the moment it moves from rest untill the movement of starting normal flight;

(55) "to land" is the action under normal conditions of making contact with the ground or a solid platform or water by an aircraft equipped for this purpose;

(56) "to pilot" means to manipulate the flight controls of an aircraft during flight time;

(57) "type of air craft" means all aircraft of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics;

(58) "type rating" means a rating for each type of aircraft;

(59) "under control" an aircraft is said to be "under control" when it is able to manoeuvre as required by these rules;

(60) "visible" as applied to light means visible on a dark night with a clear atmosphere.

(2) For rule 6, the following rules shall be substituted, namely :—

"6. *Licensing of Personnel.*—Every aircraft shall carry and be operated by the personnel prescribed in part V and such personnel shall be licenced in the manner prescribed in that part and in Schedule II.

Provided that in case of an aircraft not registered in India, such personnel shall be licensed in accordance with the regulations in force in the State in which the aircraft is registered :

Provided further that a trainee pilot who is learning to fly may fly without a licence any aircraft of an all-up weight not exceeding 1,500 kgs. if (a) the aircraft is fitted with dual controls, (b) a flight instructor is carried on board, (c) prior notice of the flight is given to the persons in-charge of the aerodrome from which the flight is made and (d) no other person is carried on board the aircraft.

6A. *Type of Aircraft to be included in rating.*—No person shall fly as pilot of an Aircraft which is not included or entered in the aircraft rating of his licence, except as provided in rule 6B.

"6B. *Flights to qualify for extension of a licence.*—The holder of a pilot's licence may fly within the Indian territory as pilot of an aircraft of type which is not included in the aircraft rating of his licence for the purpose of qualifying for the inclusion of such type :

Provided that when he is so flying, no person shall be carried on board the aircraft unless he is :—

(a) a person required by the rules to be carried as a member of the operating crew, or

(b) a person who is flying, with the consent of the operator of the aircraft, for the purpose of being trained as a member of the operating crew, or

(c) a person whose presence may be required on board the aircraft for the purpose of imparting or supervision of training, or conducting a flight test, or

(d) a person who may be specially authorised by the Director General:

Provided further that such flights are carried out within 5 nautical miles of a licenced aerodrome or a Government aerodrome, and prior notice of the flight is given to the person in-charge of the aerodrome from which the flight is made."

(3) For sub-rule (5) of rule 19, the following sub-rule shall be substituted namely:—

"(3) if the Central Government is satisfied that there is sufficient ground for doing so or, in the case of suspension during investigation that suspension is necessary in the public interest, it may, for reasons to be recorded in writing,—

(a) suspend any certificate, rating or licence, or any or all of the privileges of any certificate, rating or licence, for any specified period;
(b) suspend any certificate, rating or licence during the investigation of any matter;
(c) cancel any certificate, rating or licence; or
(d) endorse any adverse remarks on any certificate rating or licence.

NOTE.—The decision of the Central Government as to whether any ground constitues sufficient ground for suspension of the certificate, rating or licence in the public interest under this sub-rule shall be final and binding."

(4) In rule 20, for the words and figures, "Rules 5, 6, 7, 12, 15, 17, 19 and 25 shall not apply to gliders", the following shall be susbstituted, namely:—

"Rule 7 shall not apply to gliders."

(5) For rule 28, the following rule shall be substituted, namely:—

"28. *Minimum age for sole control of aircraft.*—No person, being under 16 years of age shall have sole control of a glider in motion and no person under 17 years of age shall have sole control of any other aircraft in motion and no person shall cause or permit any other person to have

sole control of an aircraft in motion unless he knows or has reasonable cause to believe, such other person to have attained the age of 16 years in the case of gliders and 17 years in the case of all other aircraft".

(6) For rule 38, the following rule shall be substituted, namely:—

"38. *Licensing Authority.*—The authority by which the licences and ratings specified below may be granted, renewed or varied shall be the Central Government, which may withhold the grant or renewal of a licence or a rating, if for any reason it considers it desirable to do so:—

(*a*) Student Pilot's Licence (for aeroplanes, helicopters and gliders),
(*b*) Private Pilot's Licence (for aeroplanes and helicopters),
(*c*) Commercial Pilot's Licence (for aeroplanes and helicopters),
(*d*) Senior Commercial Pilot's Licence (for aeroplanes),
(*e*) Airlines Transport Pilot's Licence (for aeroplanes),
(*f*) Instrument Rating,
(*g*) Assistant Flight Instructor's Rating (aeroplanes),
(*h*) Flight Instructor's Rating (for aeroplanes, helicopters and gliders),
(*i*) Glider Pilot's Licence,
(*j*) Student Navigator's Licence,
(*k*) Flight Navigator's Licence,
(*l*) Student Flight Engineer's Licence,
(*m*) Flight Engineer's Licence,
(*n*) Flight Radio Telephone Operator's Licence,
(*o*) Flight Radio Operator's Licence."

(7) After rule 38, the following rule shall be inserted, namely:—

"38A. *Carriage of operating crew.*—Subject to the provisions of rules 6, 6A and 6B, every aircraft registered in India shall comply with such of the following requirements in respect of the personnel which it carries and by

which it is operated as are applicable to the aircraft and type of operation concerned, namely :—

(1) *Pilot*

(*a*) *Private Aircraft.*—Every private aircraft shall be flown by a person holding a valid pilots's licence issued in accordance with Schedule II :

Provided that :

(i) a private aircraft shall not be flown by a person holding a Student Pilot's licence ;

(ii) a private aircraft shall be not flown by a person holding a Private Pilot's licence for remuneration or hire of any kind ;

(iii) a private aircraft carrying passengers at night, shall not be flown by a person holding a Private Pilot's lincence, without having a valid Night Rating.

(*b*) *Public Transport and Aerial Work Aircraft.*—Every public transport or aerial work aircraft (other than a gilder) shall be flown by a person holding an appropriate professional pilot's licence, *i.e.*, a Commercial, Senior Commercial or Airline Transport Pilot's licence issued in accordance with Schedule II :

Provided that an airctaft other than a glider which is the property of, or is being used by a duly constituted flying club may be flown by a person holding a Student or Private Pilot's licence for the purpose of receiving instructions or of qualifying for renewal of a licence or for issue of a higher category of licence :

Provided further that an aircraft other than a glider which is the property of, or is being used by, a duly constituted flying club flown by a member and carrying a person otherwise than for the purpose of instructing such person in flying shall not, for the purpose of this rule, be deemed to be flown for public transport ; if however, in respect of such carriage payment is made, either

directly or indirectly, to the pilot of the aircraft or the pilot of the aircraft is a paid employee of the flying club, the aircraft shall be deemed to be flown for public transport.

(2) *Flight Instructor or Assistant Flight Instructor.*—(*a*) Every aircraft which is being used for the purpose of giving dual instruction in piloting shall carry a person holding an appropriate professional pilot's licence, that is, a Commercial, Senior Commercial or Airline Transport Pilot's Licence or a Glider Pilot's Licence, as the case may be, which has an appropriate Flight Instructor's or Assistant Flight Instructor's rating issued in accordance with Schedule II.

(*b*) No person other than a person having a Flight Instructor's or Assistant Flight Instructor's Rating shall impart instructions in piloting an aircraft.

(3) *Flight Navigator.*—Every public transport aircraft engaged on a flight without landing over a great circle distance of more than 600 nautical miles, shall carry on board a Flight Navigator licensed in accordance with Schedule II, if the total distance between any two consecutive radio navigational fixing aids located within 30 nautical miles of the route of the proposed flight and capable of being used by the aircraft is more than 600 nautical miles:

Provided that the Director General may require a Flight Navigator to be carried on board an aircraft on any flight.

(4) *Flight Engineer.*—Where a Flight Engineer is required to be carried on board an aircraft as flight crew member under sub-rule (7), he shall be a person holding the appropriate licence in accordance with Schedule II.

(5) *Flight Radio Operator.*—An aircraft which is required to be equipped with radio apparatus in accoradance with rule 63 shall carry, in addition to the pilot and whether or not it participates in the international service of public transport, a person holding a Flight Radio Operator's licence, issued in accordance with Schedule II, to operate radio apparatus on such aircraft:

Provided that the Director General may, for such period and subject to such terms and conditions as he may determine, permit the operation of radio apparatus in any aircraft by a person holding a Flight Radio Telephone Operator's licence.

(6) *Flight Radio Telephone Operator.*—An aircraft which is equipped or required to be equipped with radio apparatus in accordance with rule 63 and which communicates by radio telephony, shall carry a person holding a Flight Radio Telephone Operator's licence issued in accordance with Schedule II, to operate radio apparatus on such aircraft.

(7) *Minimum crew for any flight.*—The number and description of the flight crew members operating any flight of an aircraft registered in India shall be :—

(*a*) if a certificate of airworthiness in respect of the aircraft is in force, at least the number and description of persons specified as the minimum operating crew for that aircraft in the certificate of airworthiness ;

(*b*) if no certificate of airworthiness in respect of the aircraft is in force, but a certificate of airworthiness in respect of that aircraft has previously been in force, at least the number and description of persons specified as the minimum operating crew in the certificate of airworthiness last in force in respect of that aircraft ;

(*c*) if no certificate of airworthiness in respect of the aircraft is or has been in force and the aircraft is a series aircraft conforming with a prototype or prototype (modified) aircraft in respect of which a certificate of airworthiness has been issued, at least the number and description of persons specified as the minimum operating crew in that certificate of airworthiness ;

(*d*) in all other cases, at least such number and description of persons sufficient to ensure the safety of the aircraft as may be approved by the Director General."

(8) Rule 39 shall be omitted.

(9) For rule 39A, the following rule shall be substituted, namely :—

" 39A. *Disqualification from holding or obtaining a licence.*—(1) Where the licensing authority is satisfied, after giving him an opportunity of being heard, that any person—

(*a*) is a habitual criminal or is habitually intemperate in the use of alcohol, or is an addict of narcotics, drugs and the like, or

(*b*) is using, has used or is about to use an aircraft in the commission of a cognizable offence or in contravention of these rules, or

(*c*) has, by his previous conduct as member of the crew of an aircraft, shown that he is irresponsible or is likely to endanger the safety of the aircraft or any person or thing carried therein, or of other aircraft or persons or things on the ground,

the licensing authority may, for reasons to be recorded in writing, make an order disqualifying that person for a specified period from holding or obtaining a licence.

(2) The Central Government may debar a person permanently or temporarily from holding any licence mentioned in rule 38 if in its opinion it is necessary to do so in the public interest.

(3) Upon the issue of any order under sub-rule (1) or sub-rule (2), the person affected, if he is the holder of a licence, shall forthwith surrender his licence to the licensing authority, if the licence has not already been surrendered. The licensing authority shall keep the licence until the expiry of the period for which the person has been disqualified or debarred or if he has been debarred permanently, for a period of 5 years."

(10) For rule 39B, the following rule shall be substituted, namely :—

" 39B. *Medical standards.*—(1) No licence or rating referred to in rule 38, required for any of the personnel of

the aircraft shall be issued or renewed unless the applicant undergoes a medical examination with an approved medical authority and satisfies the medical standards as notified by the Director General:

Provided that if in the opinion of the approved medical authority the condition of the applicant is not such as to introduce any hazard either of sudden incapacity or of inability to perform his duties safely during the period of validity of his licence or rating and failure to attain the requirement is capable of being compensated and the Director General has satisfactory evidence that the applicant has already acquired and demonstrated his ability, skill and experience which compensate for his deficiency, the licence or rating may be renewed or endorsed with any special limitation when the safe performance of flight duties is dependant on compliance with such limitations:

Provided further that, in the case of a member of the operating crew of an aircraft engaged in public transport or aerial work who is on duty in the territory of a foreign country where medical centres recognised by the Director General do not exist, the Director General may renew the licence or rating for two consecutive periods of three months each without the candidate having successfully undergone the prescribed medical examination if such candidate produces a medical certificate from a registered practitioner in modern medicine declaring his fitness in accordance with the prescribed medical standards.

(2) The Director General may require a member of any flight crew to undergo a medical examination by any Medical Authority at any time, if, in his opinion, such examination is necessary in the interest of safety of operations."

(11) For rule 41, the following rule shall be substituted, namely:—

"41. *Proof of competency.*—Applicants for licences and ratings shall produce proof of having acquired the flying experience and having passed satisfactorily the tests and examinations specified in Schedule II in respect of the licence or rating concerned:

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Provided that a person who is a qualified pilot from the Indian Air Force and who produces satisfactory evidence to show that he possesses the necessary flying experience, competency and standards of physical fitness as required under these rules may be exempted from all or any of the flying tests and from medical or other technical examinations (a) by the Director General, in respect of the issue of Private Pilot's and Commercial Pilot's licence, and (b) by the Central Government, in respect of the issue of the Senior Commercial and Airline Transport Pilot's Licences:

Provided further that a person to whom a licence of a particular class has been issued by the competent authority in a contracting State may be exempted by the Director General from all or any of the flying tests or technical examinations required for issue of a licence if his flying experience and competency are not less than the flying experience and competency laid down in Schedule II in respect of the corresponding licence under these rules. If he is the holder of a current licence, he may be further exempted from medical examination for the period for which his licence is current:

Provided further that in the case of a licence issued under any of the preceding provisions, only such type or types of aircraft shall be entered in the aircaft rating of the licence as in the opinion of the Director General the applicant has sufficient and satisfactory experience and competency to fly:

Provided further that the Director General may, on examination of the syllabi, determine the relative equivalence of technical examinations for granting exemptions to applicants from passing the examinations required under Schedule II:

Provided further that the Director-General may require any candidate, training establishment or operator to produce for examination all relevant training records, including the syllabi, certificates, mark-sheets, flight-test reports, assessments, etc., in respect of the candidate who has undergone a course of training, examination or flight-test, etc., with such training establishment or operator."

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(12) After rule 41, the following rule shall be inserted, namely :—

"41A. *Checks, Tests and Examinations.*—(1) The Director General may conduct examinations specified in Schedule II, may fix examination centres within India, appoint invigilators and lay down the procedure for conducting the examinations.

(2) The Director General may appoint Examiners for carrying out flying tests and technical examinations required under Schedule II and may also appoint a Board to conduct oral examinations when necessary.

(3) The Director General may determine the manner in which the proficiency checks shall be carried out and may approve check pilots and examiners for this purpose. He may require their reports to be submitted to him in respect of any flying test on any aircaft for which an aircaft rating is desired on a licence or which is entered in the aircraft rating of the licence and the renewal of which is desired or for checking proficiency at any time in respect of any aircraft included in the aircraft rating of the licence.

(4) The Director General may debar permanently or temporarily a candidate from any flying test or examination if, in his opinion, the applicant has adopted unfair means during the test or examination.

(5) The Director General may declare any flying test or examination conducted by a Check Pilot or any Examiner or a Board null and void, if in the opinion of the Director General the test or the examination has not been carried out to his satisfaction, and require the test or examination to be carried out again by another Check Pilot or Examiner or a Board. The Director General may also take such action against the Check Pilot or Examiner as he may deem fit under rule 19.

(6) If a licence holder or a candidate for a licence or rating has failed in any flying test subsequent to any flying test successfully undergone by him for issue or renewal of the licence or rating, the previous test as far as it is affected by the subsequent flying test in which he has failed

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will be considered invalid from the date of the subsequent test and the privileges accruing as a result of such earlier test shall be deemed to have been withdrawn.

(7) Detailed syllabi for the technical examinations for the issue of flight crew licences and ratings shall be laid down by the Director General."

(13) For rule 42, the following rule shall be substituted, namely :—

"*42. Licences and their renewal.*—The licences and ratings mentioned in Rule 38 may be issued or renewed for any period not exceeding the period specified in Schedule II in respect of each licence or rating:

Provided that if, on the date of application for renewal, the licence or rating had expired for the periods specified below, the applicant may be required to qualify in or complete the examinations and tests specified against them and such other examinations and tests as the Director General may consider necessary to demonstrate the applicant's competency to hold that licence or rating :—

(a)	for a period exceeding 2 years but not exceeding 3 years.	Air Regulations and tests of skill,
(b)	for a period exceeding 3 years.	All examinations and tests required for the issue of the licence or rating:

Provided further that the Director-General may, before the renewal of a licence or a rating, require an applicant to satisfy all or any of the requirements for the issue of licence or a rating of the same class, if, in the opinion of the Director-General, the competency of the applicant is below the standard required for the licence or rating :

Provided further that, in the case of a pilot or a flight engineer, the Director-General may, when renewing a licence or a rating, delete any type of aircraft entered in the aircraft rating if he is satisfied that the holder of the licence does not have reasonable recent flying experience or does not

possess the required standard of competency on that type of aircraft.

(2) The holder of a licence shall not exercise the privileges of his licence without being declared fit after a fresh medical examination in the event of his having—

(a) a sickness or injury involving incapacity for a period of fifteen days or more for the work for which he is licensed ; or

(b) an injury sustained in any accident occurring during the exercise of the privileges of his licence or otherwise and which is likely to cause incapacity or impair his efficiency in the discharge of his duties.

The licence holder or his employer shall immediately notify all the relevant details of the sickness or injury to the Director-General.

(3) The licence of a person disqualified under sub-rule (2) shall be deemed to be invalid until the holder passes a fresh medical examination.

(4) The holder of a licence shall not exercise the privileges of his licence during any period when he is aware that his physical condition has deteriorated below the standard required for that category of licence."

(14) Rule 43 shall be omitted.

(15) For rule 47, the following rule shall be substituted, namely :—

"47. *Minimum age for holding a Licence.*—The minimum age of a person who is otherwise qualified and to whom a licence may be granted shall be as laid down in Schedule II."

(16) For rule 48, the following rule shall be substituted, namely :—

"48. *Fees and other Charges.*—(1) The following fees shall be paid for the issue, renewal, validation or re-validation of licences and ratings of the issue of duplicate

licences and for the tests and examinations laid down in these rules for such licences and ratings:—

	Description of Licence/ rating		Fee for Technical examinations	Fee for issue, validation, renewal or re-validation and issue of duplicates
			Rs.	Rs.
1	Student pilot's licence	...	10	5
2	Private pilot's licence	...	10	5
3	Commercial pilot's licence	...	20	10
4	Senior Commercial pilot's Licence	...	30	10
5	Airline Transport Pilot's Licence	...	30	10
6	Instrument Rating	...	15	5
7	Assistant Flight Instructor's Rating	...	10	5
8	Flight Instructor's Rating	..	15	5
9	Extension of aircraft rating for each type.		5	5
10	Glider Pilot's Licence	...	5	5
11	Student Navigator's Licence	...	30	5
12	Flight Navigator's Licence	...	30	10
13	Student Flight Engineer's Licence	...	30	5
14	Flight Engineer's Licence	...	30	10
15	Flight Radio Telephone Operator's Licence (Provisional).		10	5
16	Flight Radio Telephone Operator's Licence.		10	10
17	Flight Radio Operator's Licence—Provisional.		20	5
18	Flight Radio Operator's Licence	...	20	10

(2) For all the flying tests, the candidate shall be required to provide the aircraft and bear all charges in respect of the flight. If a Government examiner is carried on board, during the flying tests, a fee at the rate of Rs. 10 per hour or part of an hour so flown, shall be paid to the Central Government.

(3) The fees for the medical examinations conducted by the official Medical Board shall be paid in the manner as prescribed and notified by the Director General.

(4) Every application for technical examination or the issue, validation, renewal or re-validation of licences and ratings or the issue of duplicate licences and rating shall be paid in the manner prescribed and notified by the Director General.

(5) When in any case the licence or rating is not issued, validated, renewed or re-validated or a duplicate licence or rating is not issued, the Central Government may order the refund to the applicant of a proportionate part of the sum paid as fees."

(17) Sub-rule (10) of rule 67 shall be omitted.

(18) After rule 67, the following rules shall be inserted, namely :—

"67A. *Log Books of Flight Crew Personnel and logging of Flight time.*—(1) Every member of the Flight Crew licensed under these rules shall maintain a personal log book, in the form prescribed by the Director General, and all flight times shall be logged therein.

(2) All entries in log books shall be made in ink.

(3) Log books shall be preserved for not less than 5 years after the date of the last entry therein.

(4) Every member of the Flight Crew shall certify the accuracy of the entries in his log book with respect to flight time at least at the end of each calendar month. The Pilot-in-command during dual instruction shall certify entries with respect to flight time during such dual instruction. At the end of every quarter in a year, that is at the end of March, June, September and December, log books shall be certified for correctness of entries therein,

(*a*) by competent authorities, such as, the Operations Manager, Deputy Operations Manager or Chief Pilot of the Company or Corporation concerned, in the case of professional pilots,

(*b*) by the Chief Flying Instructor, in the case of members of the Club, and

(c) by 'Aerodrome Officers, Assistant Aerodrome Officers or such other officers as may be designated by the Director General, in the case of all other persons.

(5) Flight time during which a pilot is under dual instruction shall be entered in his log book as "dual" and the pilot giving instruction shall make entries in the log book of the pilot under instruction showing the nature of the instruction given.

(6) Flight time spent in performing under supervision of a pilot-in-command, the duties and functions of a pilot-in-command may be logged as pilot-in-command provided the person is entitled and authorised to fly in command of that type of aeroplane by virtue of the ratings and Privileges of his pilot's lience. In all other cases, such flight time shall be logged as co-pilot with appropriate indication in the remarks column.

(7) The holder of a Student Pilot's licence may log as pilot-in-command only that portion of the flight time during which he is the sole occupant of an aircraft provided that, in the case of an aircraft which requires more than one pilot in accordance with sub-rule (7) of rule 38A and rule 6B, he may log as Pilot-in-Command that portion of the flight time during which he acts as pilot-in-command of the aircraft.

(8) The holder of a Private Pilot's licence may log as pilot-in-command only the flight time during which he acts as pilot-in-command.

(9) The holder of a Commercial, Senior Commercial or Airline Transport Pilot's licence may log as pilot-in-command the flight time during which he acts as pilot-in-command. He shall log as co-pilot the flight time during which he acts as co-pilot.

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(10) A Flight Instructor may log as pilot-in-command the flight time during which he acts as an Instructor but the log entries shall indicate in the remarks column that flight time was flown as an Instructor.

(11) Instrument flight time may be logged by the pilot manipulating the controls of an aircraft in flight only when the aircraft is flown solely by reference to instruments, either under actual or simulated instrument flight conditions. Over-the-top flying shall not be logged as instrument flying time.

(12) Instrument ground time may be logged in full by the pilot while flying solely by reference to instruments, in any recognised synthetic device which simulates instrument flight conditions.

(13) A pilot who acts as Examiner or Check Pilot may log as pilot-in-command the flight time during which he so acts, provided he is entitled and authorised to fly in command of that type of flying machine by virtue of the ratings and privileges of his pilot's licence.

(14) A flight Navigator shall log the flight time as a Flight Navigator during which he is engaged in actual navigational duties. Flight time during which a Flight Navigator performs actual navigational duties under supervision of a licensed Flight Navigator shall be logged as a Flight Navigator with the indication "under supervision" in the remarks column.

(15) A Flight Engineer shall log the flight time as a Flight Engineer during which he is engaged in actual Flight Engineer's duties. Flight time during which a Flight Engineer performs actual Flight Engineer's duties under supervision of a licensed Flight Engineer shall be logged as a Flight Engineer with the indication "under supervision" in the remarks column.

(16) A Flight Radio Telephone Operator/a Flight Radio Operator shall log the flight time as Flight Radio Telephone Operator/Flight Radio Operator as the case may be, during which he actually performs the duties of a Flight Radio Telephone Operator/Flight Radio Operator.

67B. No person shall destroy, mutilate, alter or render illegible any entry made, or wilfully make or procure or assist in the making of any false or frauduient entry in or omission from any log book referred to in rules 67 and 67-A.

(19) For Schedule II, the following Schedule shall be substituted, namely :—

SCHEDULE II

(*See* Rule 7 and Part V)

SECTION A

General

1. (*a*) The evidence normally required as proof of flying experience shall consist of the production of a personal log book certified by the appropriate authority specified in sub-rule (4) of rule 67A, or of a certified extract therefrom in the form which may be prescribed by the Director General. Such flying experience shall be to the satisfaction of the Director General.

(*b*) Flying experience required for issue of Private Pilot's and Commercial Pilot's Licences shall be acquired under the supervision of a Flight Instructor and shall be on aircraft having valid Certificates of Airworthiness, maintained in accordance with rules 57 to 60 of the Indian Aircraft Rules 1937, and entered in the Aircraft Rating of Pilot's licence, currently held by him.

2. The evidence of air navigation experience required in para 1 (b) of Section O of this Schedule must be produced in the form of personnel log book, certified by a specified

authority, or a certified extract therefrom in the prescribed form and navigation logs, charts and working of astronomical observations. Such air navigation experience shall be to the satisfaction of the Director General.

3. Flight by night for the purpose of this Schedule, except where otherwise stated means flight performed between the period of one hour after sunset and one hour before sunrise.

4. A cross country flight for the purpose of this Schedule except sections B and C and where otherwise stated means a flight of not less than 100 nautical miles from the aerodrome from which the flight started, whether over land or sea.

5. The flying tests prescribed in this schedule may be carried out in any order. In each flying test, unless otherwise specified, an approved examiner shall be on board the aircraft. A barograph shall be carried on all flying tests, carried out in gliders, helicopters and single-engined aircraft, unless exempted by the Director General.

6. The technical and other examinations together with other requirements for a lience or rating under this Schedule, must be completed within a period of two years immediately preceding the date of application for licence or rating unless otherwise specified.

7. Notwithstanding what has been stated in paragraph 6, the Technical examinations in aircraft and engines for inclusion of a type of aircraft in the aircraft rating of a licence under this Schedule shall have been completed within a period of 12 months immediately preceding the date of application.

8. An applicant who fails to pass in any subject of the Technical examinations specified in paragraph 1 under "knowledge" of relevant sections of this Schedule, in three attempts will be required to take the whole examination again.

9. An applicant who fails in any subject of the technical examinations specified in this Schedule, shall not be permitted to appear for re-examination within a period of

three months or such lesser period as may be specified by the Director General.

10. The candidate shall, on demand by the Examiners, furnish, before each test, proof of identity.

11. (*a*) Application for issue/validation/renewal or revalidation of a licence and/or rating shall be made either to the Director General of Civil Aviation, New Delhi or to any other authority designated by him on a prescribed form.

(*b*) Such applications for the issue of licence or rating shall be accompanied by—

(i) three unmounted photographs, a size 3 cms × 4 cms of the applicant's head (uncovered) and shoulders in front view;
(ii) necessary medical certificates, and examiner's reports where these have not been sent direct;
(iii) treasury receipt for the payment of the prescribed fee;
(iv) proof of age and any other particulars and information as required by the Director General.

SECTION B

STUDENT PILOT'S LICENCE

(For Aeroplanes, Helicopters or Gliders)

1 **Requirements for issue of Licence.**—An applicant for a Student Pilot's Licence shall satisfy the following requirements:—

(*a*) *Age.*—He shall be not less than 16 years of age on the date of application if he is an applicant for a Student Pilot's Licence for Gliders and not less than 17 years on that date in other cases;

(*b*) *Medical Fitness.*—He shall produce on a prescribed *pro forma* a certificate of physical fitness from a registered medical practioner after undergoing a medical examination, during which he shall have established his medical

fitness on the basis of compliance with the requirements as notified by the Director General under rule 39 B;

(*c*) *Knowledge.*—He shall pass an oral examination in the following subjects unless he has held a pilot's licence of a higher order:—

(i) *Air Regulations.*—including flight rules and air traffic control practices and procedures mainly pertaining to local and cross-country flights under visual Flight Rules;

(ii) *Air Navigation.*—elementry principles of air navigation, including elementray knowledge of aeronautical maps, magnetism, magnetic compasses, simple navigational instuments and simple flight planning;

(iii) *Aviation, Meteorology.*—elementary knowledge of meteorology;

(iv) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flight, aircraft, engines, instruments and operating limitations pertaining to the type of aircraft concerned.

NOTE.—1. The examination shall be conducted by a Board constituted and approved by the Director General.

2. A candidate who has passed the examinations mentioned in sub-clauses (i) and (iv) will be deemed to satisfy the requirements in respect of knowledge for the issue of this licence.

2. **Validity.**—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 12 months from the date of medical examination. The licence shall lapse on the holder obtaining a pilot's licence of a higher order for the same category of aircraft.

3. **Renewal.**—The licence may be renewed for a period not exceeding 12 months from the date of a fresh medical examination, subject to the total validity of the licence not exceeding 24 months from the date of issue.

4. **Aircraft Rating.**—The licence shall indicate the class and the type of aeroplanes or helicopters or gliders the

holder is entitled to fly. Only those types of aircraft may be entered in respect of which the candidate has-passed the examination in Aircraft and Engines mentioned in paragraph 1 (c):

Provided that in respect of aeroplanes, aircraft rating shall not include types of aeroplanes having an all-up weight exceeding 1,500 kgs. except where a student pilot has previously held a higher order of pilot's licence for aeroplanes having aircraft rating on that type.

5. **Privileges.**—Subject to the validity of endorsements and ratings in the licence the holder of a Student Pilot's Licence is entitled to fly within Indian territory only, as pilot-in-command of any aeroplane, helicopter or glider entered in the aircraft rating of his licence:

Provided that—

(*a*) he shall fly at all times under the authority and supervision of a Flight Instructor or an Approved Examiner;

(*b*) he shall fly under Visual Flight Rules only;

(*c*) he shall not carry passengers, animals and goods or fly for hire, reward or remuneration of any kind;

(*d*) he shall not undertake cross-country flights unless he has a minimum of 10 hours of solo flight time and has passed the examinations mentioned in sub-clauses (ii) and (iii) of clause (c) of paragraph 1.

NOTE.—Cross country flight in this section means a flight to a point beyond a radius of 15 nautical miles from the aerodrome of departure.

SECTION C

PRIVATE PILOT'S LICENCE (AEROPLANES)

1. **Requirements for Issue of Licence.**—An applicant for a private Pilot's licence shall satisfy the following requirements:

(*a*) *Age.*—He shall be not less than 17 years of age on the date of aplication ;

(*b*) *Medical Fitness.*—He shall produce on a prescribed *pro forma* a certificate of physical fitness from a registered medical practitioner after undergoing a medical examination during which he shall have established his medical fitness, on the basis of compliance with the requirements as notified by the Director General under Rule 39 B ;

(*c*) *Knowledge.*—He shall pass a written examination in the following subjects :—

(i) *Air Regulations.*—including flight rules, air traffic control practices and procedures and regulations concerning operations of private aircraft ;

(ii) *Air Navigation.*—elementary principles, including elementary knowledge and use of aeronautical maps and charts, time, magnetic compasses, simple navigational instruments, radio aids, visual and D. R. Navigation and simple flight planning ;

(iii) *Aviation Meteorology.*—elementary aviation meteorology including significance of aerodrome meteorological observations and warnings ; elementary knowledge in reading meteorological charts and of meteorological procedure relating to cross-country flights ; salient features of Indian claimatology ;

(iv) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flight, aircraft, engine, instruments, operating limitations, handling, care and preflight inspection. The examination shall also include questions pertaining to the class and the type of aeroplane for which an aircraft rating is desired ;

(*v*) *Seamanship.*—Important abbreviations used in Admiralty charts, Regulations for preventing collisions at sea ; lights to be carried by ships and seaplanes ; Uniform system of Buoyage ; Meaning of High Water (HW), Low Water (LW), Mean High Water Springs (MHWS), Mean High

Water Neaps (MHWN), Mean Low Water Springs (MLWS), Mean Low Water Neaps (MLWN) and chart Datum—applicable only to aircraft rating to include amphibians and seaplanes.

(*d*) *Experience.*—He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane not less than 40 hours of flight time, dual and solo which shall include :—

(*i*) not less than 20 hours of solo flight time ;

(*ii*) not less than 5 hours of cross-country flight time, as the sole occupant of an aeroplane, including a round-trip flight to an aerodrome not less than 75 nautical miles distance from the point of departure and including not less than 2 full-stop landings at different points along the route ;

(*iii*) not less than 10 hours of solo flight time completed within a period of 12 months immediately preceding the date of application for the licence and must include the cross-country flight time mentioned in clause (ii).

NOTE 1. "Cross country flight for purposes of sub-clause (ii) means a flight to a point beyond a radius of 40 nautical miles from the aerodrome of departure".

2. Flight time require under sub-clauses (ii) and (iii) may be included in the total solo flight time indicated in clause (i).

(*e*) *Skill.*—He shall have demonstrated his competency to the satisfaction of the Examiner by undergoing the following flying tests on the type of aeroplane to which the application for licence relates within a period of 6 months immediately preceding the date of such application :—

The Flying Test shall include preflight inspection and ground handling of aeroplanes ; take-offs, climb and general flying ; descent and glide ; stalling, spinning and recovery ; landing and

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emergency manoeuvres including simulated engine failure on take-off, etc;

For multi-engine aeroplanes the test shall include all manoeuvres used in normal flight with symmetric and asymmetric power; approach, landings and overshoot with one or more engines inoperative.

NOTE.—Stalling and spinning shall be carried out only on the types of aeroplanes approved and from the minimum altitude laid down by the Director General.

2. **Validity.**—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 24 months from the date of medical examination, if the applicant is below 38 years of age and not exceeding 12 months from the date of medical examination if the applicant is 38 years of age or above except where an applicant is medically examined for the renewal of his licence during 30 days immediately preceding the date of expiry of the licence, full period of validity, as applicable, may be allowed from the date of expiry.

3. **Renewal.**—The licence may be renewed on receipt of satisfactory evidence of the applicant :—

(*a*) having undergone a medical examination in accordance with clause (*b*) of paragrabh 1;

(*b*) having satisfactorily completed not less than 5 hours of flight time as Pilot-in-Command within a period of 12 months immediately preceding the date of application for renewal or in lieu thereof, having satisfactorily completed the flying tests as laid down in para 1(*c*) above within the same period.

4. **Ratings**:—(*a*) *Aircraft Rating.*—The licence shall indicate the class and the types of aeroplanes the holder is entitled to fly. An open rating for all conventional types of aeroplanes having an all-up weight not exceeding 1,500 kgs. may also be granted, if he has completed not less than 250 hours of flight time as Pilot-in-Command and has at least four different types of aeroplanes entered in the aircraft rating of his licence;

(*b*) *Night Rating.*—Night Rating entitles the holder to carry passengers at night. Conditions for the issue of this rating are detailed below :—

(i) He must have completed not less than 50 hours of flight time as Pilot-in-command and as sole manipulator of the controls, including not less than 5 hours by night, which must include a minimum of 5 take-offs and 5 landings carried out within the preceding 6 months of the date of application ;

(ii) He must have completed a dual cross-country flight by night of at least 75 nautical miles with an intermediate landing before he can be permitted to undertake solo cross-country flights by night.

(iii) He must have completed not less than 5 hours of dual instructions in instrument flying, which may include not more than 2½ hours on an approved synthetic flight trainer.

Note.—Night rating is valid only when the holder has within a period of 6 months immediately preceding the intended flight carried out 5 take-offs and 5 landings by night as Pilot-in-command.

(*c*) *Instrument Rating.*—Instrument Rating entitles the holder to fly under Instrument Flight Rules. The standard of medical fitness and the conditions for the issue of this rating are laid down in Section G.

5. **Extension of Aircraft Rating.**—For extension of the Aircraft Rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of having passed a written examination in aircraft and engines, as mentioned in clause (*c*) of paragraph 1 and of having satisfactorily completed the flying tests as laid down in clause (*e*) of that paragraph, in respect of the type of aeroplane for which extension of Aircraft Rating is desired. The flying test shall have been completed within a period of 6 months immediately preceding the date of application for extension of the Aircraft Rating.

6 **Privileges.**—Subject to the validity of endorsements and ratings in the licence, the privileges of the holder of a Private Pilot's licence, shall be to act, but not for remuneration, as Pilot-in-Command or as Co-pilot of any aeroplane which is entered in the Aircraft Rating of his licence and carry passengers therein, provided that no flight is undertaken for hire, or remuneration of any kind whatsoever and provided further that pgssengers are carried by night only with a valid night rating and no flight is undertaken under Instrument Flight Rules without a current instrument rating.

SECTION D

COMMERCIAL PILOT'S LICENCE

(AEROPLANES)

1. **Requirements for issue of Licence.**—An applicant for a Commercial Pilot's Licence shall satisfy the following requirements.

(*a*) *Age.*—He shall be not less than 18 years of age on the date of application.

(*b*) *Medical Fitness.*—He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements, as notified by the Director General under Rule 39 B ;

(*c*) *Knowledge.*—He shall pass a written examination in the following subjects :—

(*i*) *Air Regulations* : including general flight rules, air traffic control practices and procedures and regulations concerning operations of aircraft aerodromes, search and rescue rules concerning air transit, customs and health; and knowledge of communication and navigation facilities ;

(ii) *Air Navigation.*—elementary knowledge of theoretical and practical air navigation including

knowledge and use of aeronautical maps and charts, simple projections, time, magnetism, compasses, navigational instruments, radio and radar aids, visual and D. R. navigation, plotting and flight planning ;

(iii) *Aviation Meteorology.*—elementary aviation meteorology including significance of aerodrome meteorological observations and warnings ; basic knowledge of aviation weather codes and plotting elementary synoptic meteorology including simple interpretation of weather charts ; elementary knowleding of Indian climatology and of meteorological procedures relating to aviation.

(iv) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flights; general principles and elementary knowledge of design, consturuction, maintenance and operation of aircraft, engine and instruments ; ancillary systems (*e. g.*, fuels, hydraulic, etc., etc.) and emergency systems, installations and equipment; basic knowledge of fuel and lubricants ; loading of aircraft weight distribution and its effect on flight characteristics; operating limitations, handling care and preflight inspection. The examination shall also include questions pertaining to the class and the type of aeroplane for which an aircraft rating is desired ;

(v) *Signals (Practical).*—Transmission and interpretation of aural and visual signals ;

(vi) *Seamanship.*—Important abbreviations used in Admiralty charts ; Regulation for preventing collisions at sea ; lights to be carried by ships and seaplanes ; Uniform system of Buoyage ; A general knowledge of Tides ; Meaning of High Water (HW), Low Water (LW), Mean High Water Springs (MHWS), Mean High Water Neaps (MHWN), Mean Low Water Springs (MLWS), Mean Low Water Neaps (MLWN) and chart Datum applicable to aircraft rating to include amphibians and seaplanes.

(*d*) *Experience.*—He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane within a period of 3 years immediately preceding the date of application for licence not less than 250 hours of flight time, which shall include:—

(i) not less than 150 hours of flight time as Pilot-in-Command of which not less than 50 hours shall have been completed within a period of 12 months immediately preceding the date of application for licence;

(ii) not less than 5 hours of cross-country flight time as dual and 25 hours of cross-country flight time as Pilot-in-Command including one flight of not less than 300 nautical miles in the course of which not less than 2 full stop landings at different points shall be made;

(iii) not less than 10 hours of intrument time of which not more than 5 hours may be on an approved synthetic flight trainer;

(iv) not less than 5 hours of flight time by night including a minimum of 10 take-offs and 10 landings as Pilot-in-Command and as sole manipulater of controls carried out within 6 months immediately preceding the date of application for licence.

(*e*) *Other Requirements.*—He shall be in possession of a current Certificate of Competency for operation of radio telephony apparatus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless Telegraphy (Commercial Radio Operators Certificates of Proficiency and licence to operate Wireless Telegraphy) Rules, 1951.

(*f*) *Skill.*—He shall have demonstrated his competency to the satisfaction of the Examiner by undergoing the following flying tests on the type of aeroplane to which the application for licence relates within a period of 6 months immediately preceding the date of application:—

(i) *General Flying Test by Day* shall include pre-flight inspection and ground handling of aero-

planes; take-offs, climb and general flying descent and glide; stalling, spinning and recovery; landings and emergency manoeuvres including simulated engine failure on take-off;

For multi-engine areoplanes the test shall also include at maximum landing weight all manoeuvres used in normal flight with symmetric and asymmetric power; approach, landings and overshoot with one or more engines inoperative.

NOTE.—(1) Stalling and spinning shall be carried out only on the types of aer. planes approved and from the minimum altitude laid down by the Director General.

(2) Exercise on engine failure on take-off may not be carried out for aeroplanes having an all-up weight exceeding 5,700 kgs.

(ii) *General Flying Test by Night* shall include take-offs, landing general flying and emergency manoeuvres;

For Multi-engine aeroplanes the test shall also include at maximum landing weight all manoeuvres used in normal flight including use of asymmetric power, landing and overshoot with one or more engines inoperative;

(iii) *Cross-Country Flying Test by Day* shall consist of a flight on a stipulated route of not less than 250 nautical miles, and in the course of which at least one full stop landing on a designated aerodrome along the route shall be made;

(iv) *Cross-Country Flying Test by Night* shall consist of a flight on a stipulated route of not less than 120 nautical miles, returning to the place of departure without landing elsewhere.

2. **Validity.**—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 12 months from the date of medical examination, if the applicant is below 38 years of age and not exceeding 6 months from the date of successful examination, if the applicant is 38 years of age and above, except when an applicant is medically

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examined for the renewal of his licence, during 30 days immediately preceding the date of expiry of the licence, full period of validity, as applicable, may be allowed from the date of expiry.

3. Renewal.—The licence may be renewed on receipt of satisfactory evidence of the applicant :—

(*a*) having undergone a medical examination in accordance with para. 1 (b) above ;

(*b*) having satisfactorily completed not less than 10 hours of flight time within a period of 6 months immediately preceding the date of application for renewal or in lieu thereof :—

having satisfactorily completed the general flying tests by day and night as laid down in clause (f) of paragraph 1 within the same period ;

(*c*) having a current Certificate of Competency for operation of radio telephony appartus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless Telegraphy (Commercial Radio Operator Certificates of Proficiency and licence to operate Wireless Telegraphy) Rules, 1954.

4. Ratings :

(*a*) *Aircraft Rating.*—The licence shall indicate the class and the types of aeroplanes the holder is entitled to fly. An open rating for all conventional types of aeroplanes having an all-up weight not exceeding 1,500 kgs may also be granted if he has completed not less than 1,000 hours of flight time including not less than 500 hours as Pilot-in-Command, and has at least 4 different types of aeroplanes entered in the aircraft rating of his licence ;

(b) *Instructor's Rating.*—Instructor's Rating entitles the holder to impart flying instructions. The privileges and conditions for the issue of these ratings are laid down in Sections H and I :

(c) *Instrument Rating.*—Instrument Rating entitles the holder to fly under Instrument Flight Rules. Conditions for the issue of this rating are laid down in Section G.

5. Extension of Aircraft Rating.—For extension of the aircraft rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of having passed a written examination in aircraft and engines as mentioned in clause (c) of paragraph 1, and of having satisfactorily completed the general flying tests by day and by night as laid down in clause (f) of that paragraph in respect of the type of aeroplane for which the extension of aircraft rating is desired. The flying tests shall have been completed within a period of 6 months immediately preceding the date of application for extension of the aircraft rating.

6. Privileges.—Subject to the validity of endorsements and ratings in the licence, the privileges of the holder of a Commercial Pilot's licence shall be :—

(a) to exercise all the privileges of a Private Pilot ;

(b) to act as Pilot-in-Command of any aeroplane having an all-up weight not exceeding 5,700 kgs. and which is entered in the aircraft rating of his licence, proivded that when passengers are to be carried at night he shall have carried out within a period of 6 months immediatly precedings the intended flight not less than 10 take-offs and 10 landings by night as Pilot-in-Command ;

(c) to act as Co-Pilot of any aeroplane, where a Co-Pilot is required to be carried and which is entered in the aircraft rating of his licence ;

Provided that for all flights under Instrument Flight Rules either as Pilot-in-Command or as Co-Pilot, he shall be required to have a current Instrument Rating :

Provided further that for all flights as Co-Pilot on transport aeroplanes having an all-up weight exceeding 5,700 kgs. he shall have carried out within the preceding 6 months of the intended flight appropriate proficiency checks in respect of that type of aircraft as reqired by the Director General.

SECTION E

SENIOR COMMERCIAL PILOTS LICENCE

(AEROPLANES)

1. Requirements for Issue of Licence.—An applicant for a Senior Commercial Pilot's Licence shall satisfy the following requirements :—

(a) *Age.*—He shall be not less than 21 years of age on the date of application ;

(b) *Medical Fitness.*—He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under Rule 39B ;

(c) *Knowledge*—He shall pass oral and written examinations in the following subjects :—

(i) *Air Regulations.*—including general flight rules, air traffic control practices and procedures and regulations concerning operation of aircraft; search and rescue ; rules concerning air-transit, customs and health ; knownledge of aerodromes ; flight information regions, control zones and airways, communication and navigational facilities, International Conventions of Air Navigation, International Conferences and agreements ;

(ii) *Air Navigation.*—knowledge of theoretical and practical air navigation including knowledge of aeronautical maps and charts, projections time magnetism, compasses, navigational instruments, radio and radar aids, visual and D. R. navigation, plotting and flight planning ; elementary knowledge of astro-navigation and use of Nautical tables and Air Almanac ;

(iii) *Aviation Meteorology.*—intermediate aviation meteorology with special emphasis on aviation hazards; knowledge of aviation weather codes and plotting; aircraft observation procedures; synoptic meteorology including simple analysis and interpretation of weather charts; elementary world climatology; detailed knowledge of Indian climatology and of meteorological procedures relating to aviation;

(iv) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flight; general principles and elementary knowledge of design, construction, maintenance and operation of aircraft, engine and instruments; ancillary systems (e.g. fuel, hydraulic, electrical, etc.) and emergency systems, installations and equipment; basic knowledge of fuel and lubricants; loading of aircraft and weight distribution and its effect on flight characteristics; operating limitations and handling, care and preflight inspection. The examination shall also include questions pertaining to the class and the type of aeroplane for which an aircraft rating is desired.

(v) *Signals (Practical).*—transmission and interpretation of aural and visual signals;

(vi) *Seamanship.*—Important abbreviations used in Admiralty charts; Regulations for preventing collisions at sea; lights to be carried by ships and seaplanes; Uniform system of Buoyage;

A general knowledge of Tides; Meaning of High Water (HW), Low Water (LW) Mean High Water Springs (MHWS), Mean High Water Neaps (MHWN), Mean Low Water Springs (MLWS), Mean Low Water Neaps (MLWN) and chart Datum—applicable to aircraft rating to include amphibians and seaplanes.

(d) *Experience.*—He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane within a period of 5 years immediately preceding

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the date of application for licence, not less than 1,250 hours of flight time, which shall include:

(i) not less than 200 hours as Pilot-in-Command for 150 hours as a Pilot-in-Command and 100 hours as a co-pilot performing under supervision of a Pilot-in-Command, the duties and functions of a Pilot-in-Command, provided at least 100 hours shall be of cross-country flight time including not less than 25 hours by night; and shall also include 10 take-offs and 10 landings by night;

(ii) not less than 500 hours of total cross-country flight time;

(iii) not less than 50 hours of flight time by night;

(iv) not less than 50 hours of instrument time under actual or simulated conditions of which not less than 25 hours shall be in actual flight;

(v) not less than 150 hours of flight time completed within a period of 12 months immediately preceding the date of application for the licence.

(e) *Other Requirements.*—He shall be:—

(i) the holder of or shall have held a Commercial Pilot's Licence;

(ii) in possssion of a current Certficate of Competency for operation of radio telephony apparatus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless of Telegraphy (Commercial Radio Operators Certificate of Proficiency and licence to operate Wireless Telegraphy) Rules, 1964.

(f) *Skill.*—He shall have demonstrated his competency to the satisfaction of the Examiner by undergoing the following flying tests on the type of aeroplane to which the application for licence relates within a period of 6 months immediately preceding the date of application:—

(i) *General Flying Test by Day.*—shall include pre-flight inspection and ground handling of aeroplanes; take-offs, climb and general flying;

manoeuvres at slow speed; steep turns; descent and glide; stalling, spinning and recovery; landings and emergency manoeuvres including simulated engine failure on take-off.

For multi-engine aeroplanes the test shall also include at maximum landing weight all manoeuvres used in normal flight with symmetric and asymmetric power; approach, landings and overshoot with one or more engines inoperative.

NOTE—(1) Stalling and spinning shall be carried out only on the types o aeroplanes approved and from the minimum altitude laid down by the Director General;

(2) Exercise on engine failure on take-off may not be carried out on aeroplanes having an all-up weight exceeding 20 000 kgs.

(ii) *General Flying Tests by Night*— shall include take-offs, landings, general flying and emergencies;

For multi-engine aeroplanes the test shall also include at maximum landing weight all manoeuvres used in normal flight including use of asymmetric power; landing and overshoot with one or more engines inoperative.

2. **Validity.**—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 6 months from the date of medical examination except when an applicant is medically examined for the renewal of his licence during 30 days immediately preceding the date of expiry of the licence, full period of validity may be allowed from the date of expiry.

3. **Renewal.**— The licence may be renewed on receipt of satisfactory evidence of the applicant:—

(a) having undergone a medical examination in accordance with clause (b) of paragraph 1;

(b) having satisfactorily completed not less than 10 hours of flight time as Pilot-in-Command (50 per cent of flight time as a Co-Pilot may be counted

towards requirement of flight time as Pilot-in-Command) within a period of 6 months immediately preceding the date of application for renewal or in lieu thereof; having satisfactorily completed the general flying tests by day and by night as laid down in clause (f) of paragraph 1;

(c) having a current Certificate of Competency for operation of radio telephony apparatus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless Telegraphy (Commercial Radio Operators Certificate of proficiency and licence to operate wireless Telegraphy) Rules, 1954.

4. **Ratings.**— (a) *Aircraft Rating.*—The licence shall indicate the class and the types of aeroplanes the holder is entitled to fly. An open rating for all conventional types of aeroplanes having an all-up weight not exceeding 2,500 kgs. may also be granted if he has completed not less than 3,000 hours of flight time including not less than 1,000 hours as Pilot-in-Command and has at least 4 different types of aeroplanes entered in the aircraft rating of his licence;

(b) *Instructor's Ratings.*—Instructor's Rating entitles the holder to impart flying instructions. The privileges and conditions for the issue of the ratings are laid down in Sections H and I;

(c) *Instrument Rating.*—Instrument rating entitles the holder to fly under Instrument Flight Rules. The conditions for issue of this rating are laid down in Section G.

5. **Extension of Aircraft Rating.**—For extension of the Aircraft Rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of having passed a written examination in aircraft and engines as mentioned in clause (c) of paragraph 1 and of having satisfactorily completed the general flying tests by day and by

night as laid down in clause (f) of that paragraph in respect of the type of aeroplane for which the extension of the aircraft rating is desired. The flying tests shall have been completed within a period of 6 months immediately preceding the date of application for extension of the aircraft rating.

6. **Privileges.**—Subject to the endorsement and ratings in the licence, the privileges of the holder of a Senior Commercial Pilot's Licence shall be :—

(a) to exercise all the privileges of a Private and a Commercial Pilot;

(b) to act as Pilot-in-Command of any passenger carrying aeroplane having an all-up weight not exceeding 14,000 kgs. and of any aeroplane not carrying passengers and having an all-up weight not exceeding 20,000 kgs.

(c) to act as Co-Pilot of any aeroplane when a Co-Pilot is required to be carried :

Provided that type of aeroplane is entered in the Aircraft Rating of his licence :

Provided further that he shall not act as Pilot-in-Command of an aeroplane having an all-up weight exceeding 5,700 kgs. unless he has completed on that type of aeroplane not less than 500 hours of flight time as a Co-Pilot including not less than 100 hours of flight time as a Co-Pilot performing under the supervision of a Check Pilot the duties and functions of a Pilot-in-Command and has demonstrated his competency to fly as a Pilot-in-Command to the satisfaction of the Director General :

Provided that for all flights under Instrument Flight Rules either as Pilot-in-Command or as Co-Pilot, he shall have a current instrument rating :

Provided further that for all flights as Pilot-in-Command or as Co-Pilot, on transport aeroplanes having an all-up weight exceeding 5,700 kgs.,

he shall have undergone satisfactorily within the preceding 6 months of the intended flight appropriate proficiency checks in respect of that type of aircraft as required by the Director General.

SECTION F

AIRLINE TRANSPORT PILOT'S LICENCE

(AEROPLANES)

1. **Requirements for Issue of Licence.**—An applicant for an Airline Transport Pilot's licence shall satisfy the following requirements :—

(a) *Age.*—He shall be not less than 21 years of age on the date of application ;

(b) *Medical Fitness.*—He shall produce on a prescribed proforma a certificate of physical fitness from an approved medical board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under Rule 39 B ;

(c) *Knowledge.*—He shall pass an oral and written examination in the following subjects :

(i) *Air Regulations* : including general flight rules, air traffic control practices and procedures and regulations concerning operation of aircraft ; search and rescue, rules concerning air-transit, customs and health, knowledge of aerodromes, flight information regions, control zones and airways communications and navigational facilities; International Conventionsof Air Navigation, and International confernces and agreements.

(ii) *Air Navigation* : knowledge of theoretical and practical air navigation including knowledge or aeronautical maps and charts, projections, time,

magnetism, compasses, navigational instruments, radio and radar aids visual and D. R. navigation, plotting and flight planning elementary knowledge of astro-navigation and use of nautical tables and Air Almanacs;

(iii) *Aviation Meteorology*: intermediate aviation meteorology with special emphasis on aviation hazards; knowledge of aviation weather codes and plotting; aircraft observation procedures; synoptic meteorology including simple analysis and interpretation of weather charts; elementary world climatology; detailed knowledge of Indian climatology and of meteorological procedures relating to aviation;

(iv) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flight, general principles and elementary knowledge of design, construction, maintenance and operation of aircraft, engine and instruments; ancillary systems (*e. g.* fuel, hydraulic, electrical, etc., etc.,) and emergency systems installations and equipment; basic knowledge of fuel and lubricants; loading of aircraft and weight distribution and its effect on flight characteristics; operating limitations and handling care and pre-flight inspection. The examination shall also include questions pertaining to the class and the type of aeroplane for which an aircraft rating is desired;

(v) *Signals (Practical).*—Transmission and interpretation of aural and visual signals;

(iv) *Seamanship.* Important abbreviations used in Admiralty charts; Regulations for preventing collisions at sea; lights to be carried by ships and seaplanes; Uniform system of Buoyage; A general knowledge of Tides; Meaning of High Water (HW), Low Water (LW), Mean High Water Springs (MHWS) Mean High Water Neaps (MHWN), Mean Low Water Springs (MLWS), Mean Low Water Neaps (MLWN)

and chart Datum-applicable to aircraft rating to include amphibians and seaplanes.

(d) *Experience.*—He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane within a period of 5 years, immediately preceding the date of application for licence, not less than 2,150 hours of flight time which shall include;

(i) not less than 500 hours of flight time as Pilot-in-Command or as Co-Pilot performing under supervision of a Check-Pilot, the duties and functions of a Pilot-in-Command, provided at least 200 hours out of these shall be of cross-country flight time, including not less than 50 hours of flight time by night;

(ii) not less than 1000 hours of total cross-country flight time;

(iii) not less than 100 hours of flight time by night;

(iv) not less than 100 hours of instrument time under actual or simulated instrument conditions, of which not less than 50 hours shall be in actual flight;

(v) not less than 150 hours of flight time completed within a period of 12 months immediately preceding the date of application for licence;

(*e*) *Other Requirements.*—

(i) He shall be a holder of a Commercial or a Senior Commercial Pilot's licence;

(ii) He shall have a current instrument rating;

(iii) He shall be in possession of a current certificate of compentency for operation of radio telephony apparatus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless Telegraphy (Commercial Radio Operators Certificate or proficiency and licence to operate Wireless Telegraphy) Rules, 195 .

(*f*) *Skill.*—He shall have demonstrated his competency to the satisfaction of the Examiner by undergoing the

following flying tests on the type of aeroplane to which the application for licence relates within a period of 6 months immediately preceding the date of such application:

(i) *General Flying Test by Day*—shall include preflight inspection and ground handling of aeroplanes; take-offs, climb and general flying; menoeuvres at slow speed; steep turns; descent and glide; stalling, spinning and recovery: landings and emergency manoeuvres including simulated engine failure on take-offs;

For Multi-engine Aeroplanes—the test shall also include at maximum landing weight all manoeuvres used in normal flight with symmetric and asymmetric power; approach, landings and overshoot with one or more engines inoperative.

NOTE.—Stalling and spinning shall be carried out only on the types of aeroplanes approved and from the minimum altitude laid down by the Director General.

(ii) *General Flying Test by Night.*—shall include take-offs, landings, general flying and emergencies;

For Multi-engine Aeroplanes—the test shall also include at maximum landing weight all manoeuvres used in normal flight including use of asymmetric power; landing and overshoot with one or more engines inoperative.

2. *Validity.*—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 6 months from the date of medical examination except when an applicant is medically examined for the renewal of his licence during 30 days immediately preceding the date of expiry of the licence, full period of validity may be allowed from the date of expiry.

3. *Renewal.*—The licence may be renewed on receipt of satisfactory evidence of the applicant:

(*a*) having undergone a medical examination in accordance with clause (b) of paragraph 1;

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(*b*) having satisfactorily completed not less than 10 hours of flight time as Pilot-in-Command (50 per cent of flight time as a Co-pilot may be counted towards this requirement of flight time as Pilot-in-Command) within a period of 6 months immediately preceding the date of application for renewal or in lieu thereof; having satisfactorily completed the flying tests by day and by night as laid down in clause (f) of paragraph 1 within the same period;

(*c*) having a current Certificate of competency for operation of radio telephony apparatus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless Telegraphy (Commercial Radio Operator's Certificate of proficiency and licence to operate Wireless Telegraphy) Rules, 1954.

Ratings.—

(*a*) *Aircraft Rating.*—The licence shall indicate the class and the types of aeroplanes the holder is entitled to fly. An open rating for all conventional types of aeroplanes having an all-up weight not exceeding 5,700 kgs. may also be granted if he has completed not less than 1,000 hours of flight time as a Pilot-in-Command on any aeroplane having an all-up weight of 14,000 kgs. or above;

(*b*) *Instructor's Ratings.*—Instructor's Rating entitles the holder to impart flying instructions. The privileges and conditions for the issue of this rating are laid down in Sections H & I.

(*c*) *Instrument Rating.*—No separate instrument rating is provided for in the licence. The privileges of instrument rating are included in the privileges of this licence provided that the instrument rating flight tests have been carried out to the satisfaction of the Director General within a period of 12 months immediately preceding the intended flight under Instrument Flight Rules.

5. *Extension of Aircraft Rating.*—For extension of the aircraft rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of having passed a written examination in aircraft and engines as

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mentioned in clause (*c*) of paragraph 1 and having satisfactorily completed the general flying tests by day and by night as laid down in clause (*f*) of that paragraph in respect of the type of aeroplane for which the extension of aircraft rating is desired. The flying tests shall have been completed within a period of 6 months immediately preceding the date of application for extension of aircraft rating.

6. *Privileges.*—Subject to the validity of endorsements and ratings in the licence, the privileges of the holder of an Airline Transport Pilot's Licence shall be:—

(*a*) to exercise the privileges of a Private, a Commercial and a Senior Commercial Pilot;

(*b*) to exercise the privileges of the holder of an instrument rating, provided that he shall not exercise these privileges at any time unless he has satisfactorily completed the instrument rating flight tests within a period of 12 months immediately preceding the date of intended flight under Instrument Flight Rules;

(*c*) to act as a Pilot-in-Command or as a Co-pilot of any aeroplane where a Co-pilot is required to be carried and which is entered in the aircraft rating of his licence:

Provided that he shall not act as a Pilot-in-Command of any aeroplane having an all-up weight exceeding 5,700 kgs. unless he has completed on that type of aeroplane not less than 300 hours of flight time as a Co-pilot and not less than 100 hours of flight time as Co-pilot performing under supervision of a Check-pilot, the duties and functions of a Pilot-in-Command and has demonstrated his competency to fly as a Pilot-in-Command to the satisfaction of the Director General:

Provided further that for all flights as Pilot-in-Command or as Co-pilot on a transport aeroplane having an all-up weight exceeding 5,700 kgs., he shall have undergone satisfactorily within the preceding six months of the intended flight appropriate proficiency checks in respect of that type of aircraft as required by the Director General.

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SECTION G

INSTRUMENT RATING

1. *Requirements for Issue of Rating.*—An applicant for an Instrument Rating shall satisfy the following requirements :—

(*a*) *Medical Fitness.*—He shall produce on a prescribed *proforma* a certificate of physical fitness from an approved medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under Rule 39B;

(*b*) *Knowledge.*—He shall pass oral and written examination in the following subjects :—

(i) *Air Regulations.*—including fight rules, air traffic control practices and procedures and regulations concerning operation of aircraft during Instruments Flight Rules; Aerodromes, search and rescue, rules concerning air-transit customs and health and knowledge of communications and navigational facilities;

(ii) *Air Navigation.*—elementary knowledge of theoretical and practical air navigation including knowledge and use of aeronautical maps and charts, simple projections, time, magnetism, compasses, navigational instruments, radio and radar aids, visual and D.R. navigation, plotting and flight planning;

(iii) *Aviation Meteorology.*—elementary aviation meteorology including significance of aerodrome meteorological observations and warnings; basic knowledge of aviation weather codes and plotting; elementary synoptic meteorology including simple interpretation of weather charts; elementary knowledge of Indian climatology and of meteorological procedures relating to aviation.

(*iv*) *Signals* (*Practical*).—transmission and interpretation of aural and visual signals;

(*c*) *Experience.*—He shall produce evidence of having satisfactorily completed as a pilot of an aeroplane—

(i) not less than 150 hours of flight time as a Pilot-in-Command including not less than 50 hours of cross-country flight time;

(ii) not less than 40 hours of instrument time, of which not more than 20 hours shall be instrument ground time. A minimum of 5 hours of instrument time shall have been completed within a period of 6 months immediately preceding the date of application for the Instrument Rating;

(*d*) *Other Requirements.*—He shall be—

(i) a holder of a current pilot's licence for aeroplanes;

(ii) in possession of a current Certificate of Competency for operation of radio telephony apparatus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless Telegraphy (Commercial Radio Operators Certificate of proficiency and licence to operate Wireless Telegraphy) Rules, 1954.

(*e*) *Skill.*—He shall have demonstrated to the satisfaction of the Examiner his competency to fly an aeroplane solely with the aid of instrument using full and limited instrument panel by undergoing the following flying test within a period of 6 months, immediately preceding the date of application for this rating:—

Instrument Rating Flying Test shall include preflight action, all normal in-flight manoeuvres, recovery from unusual attitudes, airways and air traffic procedures, instrument approach procedures including descent through cloud using stipulated radar aids, missed approach, overshoot and emergencies;

For Multi-engine Aeroplanes the test shall also include manoeuvres carried out on asymmetric

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power with one or more engines inoperative and emergencies.

NOTE —Stalling and spinning shall be carried out only on the types of aeroplanes approved and from the minimum altitude laid down by the Director General.

2. *Validity.*- The period of validity shall commence from the date of issue or renewal of the rating. The Instrument Rating shall be valid for a period not exceeding 12 months from the date of the satisfactory completion of Instrument Rating flight tests as laid down in clause(*c*) of paragraph 1, except when Instrument Rating Flight tests are completed during 30 days immediately preceding the date of expiry of the rating, full period of validity may be allowed from the date of expiry.

3. *Renewal.*—Instrument Rating may be renewed on receipt of satisfactory evidence of the applicant :—

(*a*) having satisfactorily completed not less than 10 hours of instrument flight time during the preceding 12 months.

Out of the total 10 hours of instrument flying experience so required, not more than 5 hours may be carried out on an approved synthetic flight trainer ;

(*b*) having satisfactorily carried out at least two instrument approach procedures on different aerodromes under the supervision of a Check-pilot either during actual or simulated instrument flying conditions ;

(*c*) having satisfactorily completed the Instrument Rating Flight tests are laid down in clause (*e*) of paragraph 1 ; and

(*d*) having a current Certificate of Competency for operation of radio telephony apparatus on board an aircraft as issued by the Ministry of Transport and Communications under the Indian Wireless Telegraphy (Commercial Radio Operations Certificate of proficiency and licence to operate Wireless Telegraphy) Rules, 1954.

NOTE.—Only that part of the flight test in clause (c) may be permitted to be carried out on an approved synthetic flight trainer which pertains to checking of candidates' knowledge of procedures.

4. **Extension of instrument rating.**—For extension of Instrument Rating to include an additional type of aeroplane, an applicant shall be required to produce evidence of having satisfactorily completed the flight test as laid down in clause (e) of paragraph I in respect of the type of aeroplane for which the extension of Instrument Rating is desired. The flying test shall have been completed within a period of 6 months immediately preceding the date of application for extension of Instrument Rating.

5. **Privileges.**—The privileges of the holder of an Instrument Rating shall be to fly under Instrument Flying Rules the types of aeroplanes on which he has demonstrated his competency in accordance with clause (e) of paragraph 1.

SECTION H

Assistant Flight Instructor's Rating (Aeroplanes)

1. **Requirements for issue of rating.**—An applicant for an Assistant Flight Instructor's Rating shall satisfy the following requirements:—

(*a*) *age.*—He shall be not less than 20 years of age on the date of application;

(*b*) *Knowledge.*—He shall pass an oral examination in the following subjects:—

(i) *Air Regulations.*—including general flight rules, air traffic control practices and procedures and regulations concerning operation of aircraft; communication and navigation facilities; aerodromes, search and rescue; rules concerning air transit, customs and health.

(ii) *Air Navigation.*—elementary knowledge of theoretical and practical air navigation including knowledge and use of aeronautical maps and charts, simple projections, time, magnetism, compasses, navigational instruments, radio and radar aids, visual and D. R. navigation, plotting and flight planning.

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(iii) *Aviation Meteorology.*—elementary aviation meteorology including significance of aerodrome meteorological observations and warnings ; basic knowledge of aviation weather codes and plotting; elementary synoptic meteorology including simple interpretation of weather charts ; elementary knowledge of Indian climatology and of meteorological procedures relating to aviation.

(iv) *Aircraft & Engines.*—including elementary knowledge of aerodynomics and theory of flight ; general principles and elementary knowledge of design, construction, maintance and operation of aircraft, engine and instruments ; ancillary systems (*e. g.* fuel, hydraulic, etc.) and emergency system installations and equipment ; basic knowledge of fuel and lubricants ; loading of aircraft ; weight distribution and its effect on flight characteristics ; operating limitation and handling, care and preflight inspection.

Note.—The examination shall be conducted by a Board constituted and approved by the Director General.

(*c*) *Experiece:*—He shall produce evidence of having satisfactorily completed as pilot of an aeroplane within a period of 5 years immediately preceding the date of application for this rating :

(i) not less than 300 hours of flight time as a pilot-in-command of aeroplane of which not less than 50 hours shall have been completed within a period of 12 months immediately preceding the date of application ; and

(ii) not less than 10 hours flying training as an Instructor under an approved Flight Instructor ;

(*d*) *Other requirements.*—He shall be holder of a current professional pilot licence ;

(*e*) *Skil'.*-He shall have demonstrated his competency as an Assistant Flight Instructor to the satisfaction of an Examiner by undergoing the follcwing ffying test within a

period of 6 months immidiately preceding the date of application for this rating. The aircraft used for the test should be fitted with dual controls;

The flying tests shall include preflight brifing; preflight inspection and ground handling of aeroplanes, take-offs, climb and general flying; decent and glide, stalling spinning ond recovery; landings, emergency manoeuvres including simulated engine failure on take-offs and de-brifing;

For Multi-engine Aeroplanes.—The test shall also include at maximum landing weight all manoeuvres used in normal flight with symmetric and asymmetric power; approach, landings and overshoot with one or more engines inoperative.

Note.—Stalling and spinning shall be carried out only on the types of aeroplanes approved and from the minimum altitude laid down by the Director General.

2. *Validity.*—The period of validity shall commence from the date of issue or renewal of this rating. This rating shall be valid for a period not exceeding 12 months from the date of the successful completion of the flying tests as laid down in clause (e) of paragraph 1, except when the flying tests are carried out during 30 days immediately preceding the date of expiry of the rating, the full period of validity may be allowed from the date of expiry.

3. *Renewal.*—The Assistant Flight Instructor's Rating may be renewed on receipt of evidence of the applicant having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 within a period of 6 months immediately preceding the date of application for renewal.

4. *Privileges.*—Subject to the validity of endorsements and rating in his Pilot's licence of which this Assistant Instructor's Rating forms a part and also to any endorsement on this rating, the privileges of the holder of an Assistant Flight Instructor's Rating shall be to impart instructions during flight by day only and under the authority and supervision of a Flight Instructor, on all types of aeroplanes having all-up-weight not exceeding 1500 kgs.

and which are entered in the Aircraft Rating of his licence provided that he shall not authorise any Student Pilot to undertake his first solo flight and shall not give instructions on aerobatics and night flying.

SECTION 1

Flight Instructor's Rating (Aeroplanes)

1. *Requirements for issue of rating.*—An applicant for a Flight Instructor's Rating shall satisfy the following requirements:—

(*a*) *Age.*—He shall be not less than 21 years of age on the date of application.

(*b*) *Knowledge.*—He shall pass a written and/or oral examination in the following subjects.—

(i) *Air Regulations.*—including flight rules air traffic control practices and procedures and regulations concerning operation of aircraft; search and rescue; rules concerning air-transit, customs and health; knowledge of aerodromes, flight information regions, control zones and airways, communications and navigational facilities, International Conventions of Air Navigation and international conferences and agreements.

(ii) *Air Navigation.*—knowledge of theoretical and practical air navigation including knowledge of aeronautical maps and charts, projections time, magnetism, compassess, navigational instruments radio and radar aids, visual and D. R. navigation plotting and flight planning; and elementary knowledge of astro-navigation.

(iii) *Aviation Meteorology.*—intermediate aviation meteorology with special emphasis on aviation hazards; knowledge of aviation weather codes and plotting; aircraft observation procedures; synoptic mateorology including simple analysis and interpretation of weather charts; elementary

world climatology ; detailed knowledge of Indian climatology and of meteorological procedures relating to aviation.

(iv) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flight ; general principles and elementary knowledge of design, construction, maintenance and operation of air craft, engines and instruments; ancillary system (e. g. fuel, hydraulic, electrical, etc.) and emergency systems, installations and equipment; basic knowledge of fual and lubricants; loading of aircraft and weight distribution and its effect on flight characteristics ; operating limitations and handling, care and preflight inspection. The examination shall also include questions pertaining to the class and the type of aeroplane for which an aircraft rating is desired if the all-up-weight of the aeroplane is in excess of 5,700 kgs.

(v) *Signals (Practical).*—transmission and interpretation of aural and visual signals.

(iv) *Seamanship.*—Important abbreviations used in Admiralty charts. Regulations for preventing collisions at sea ; lights to be carried by ships and seaplanes: Uniform system of Buoyage; A general knowledge of Tides; Meaning of High Water (H W), Low Water (LW), Mean High Water Springs (MHWS), Mean High Water Neaps (WHWN), and chart Datum applicable to aircraft rating to include amphibians and seaplanes.

Note.—The oral examination shall be conducted by a board constituted and approved by the Director General.

(c) *Experience.*—He shall produce evidence of having satisfactorily completed within a period of 5 years immediately preceding the date of the application for this rating:

(i) not less than 500 hours of fight time as Pilot-in-Command of an aeroplane including not less than (a) 20 hours by night during which at least 20 take-offs and 20 landings have been carried out (b) 100 hours of flight time satisfactorily completed in the capacity of an Assistant Flight Instructor;

(ii) an approved Flight Instructor's Course.

(*d*) *Other requirements.*—He shall be—

(i) the holder of current professional pilot's licence;

(ii) the holder of a current Instrument Rating;

(*e*) *Skill.*—He shall have demonstrated his competency as a Flight Instructor to the satisfaction of an Approved Examiner by undergoing satisfactorily the following flying tests, by day and by night, within a period of 6 months immediately preceding the date of the application for this rating. The aircraft used for the test shall be fitted with dual controls:

(i) *General Flying Test by Day.*—shall include pre-flight briefing; preflight inspection and ground handling of aeroplane; take-offs, climb and general flying; manoeuvres at slow speed, steep turns; descent and glide; stalling, spinning and recovery; landings; emergency manoeuvres including simulated engine failure on take-offs and debriefing;

For Multi-Engine Aeroplanes.—The test shall also include at maximum landing weight all manoeuvres used in normal flight with symmetric and asymmetric power; approach, landings and overshoot with one or more engines inoperative.

Note.—Stalling and spinning shall be carried out only on the types of aeroplanes approved and from the minimum altitude laid down by the Director General.

(ii) *General Flying Test by Night.*—shall include preflight briefing, take-offs, landings, general flying, emergencies and debriefing, etc.;

For Multi-engine Aeroplanes.—the test shall also include at maximum landing weight all manoeuvres used in normal flight including use of asymmetric power; landing and overshoot with one or more engines inoperative;

2. **Validity.**—The period of validity shall commence from the date of issue or renewal of this rating. The rating shall be valid for a period not exceeding 12 months from the date of medical examination undergone for issue or renewal of the Pilot's licence in which this rating is entered, except when the said medical examination is completed during 60 days immediately preceding the date of expiry of the rating, full period of validity may be allowed from the date of expiry.

3. **Renewal.**—The Flight Instructor's Rating may be renewed on receipt of satisfactory evidence of the applicant:—

(a) having undergone a medical examination in accordance with the renewal requirements of the licence on which this rating is entered;

(b) having satisfactorily completed not less than 20 hours of flight time as a Flight Instructor within a period of 12 months immediately preceding the date of application for renewal or in lieu thereof; having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 within a period of 6 months immediately preceding the date of application for renewal.

4. **Aircraft Rating.**—The rating shall indicate the class and the types of aeroplanes on which the holder is entitled to impart instructions.

5. **Extension of Aircraft Rating.**—For extension of aircraft rating to include additional types of aeroplanes having an all-up-weight exceeding 5,700 kgs., the applicant shall be required to produce evidence of :

(i) having obtained appropriate aircraft rating for that type on his professional pilot's licence ;

(ii) having satisfactorily completed not less than 500 hours of flight time as Pilot-in-Command ; and

(iii) having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 on the type desired to be included in this rating.

NOTE.—Requirements mentioned in clauses (ii) & (iii) may be varied by the Director General under special circumstances in the case of an experienced Flight Instructor who has successfully completed any special course approved by the Director General.

6. **Privileges.**—Subject to the validity of endorsements and ratings in Pilot's licence of which this Flight Instructor's rating forms a part and also any endorsement on this rating, the privileges of the holder of a Flight Instructor's Rating shall be :—

(i) to impart flying instructions on any aeroplane having an all-up-weight not exceeding 5,700 kgs. and which is entered in the aircraft rating of his licence and also on any aeroplane having an all-up-weight exceeding 5,700 kgs. and which is entered in his instructor's rating ;

(ii) to supervise and authorise Solo flights by student pilots and supervise flying instructions imparted by Assistant Flight Instructors.

SECTION J

GLIDER PILOT'S LICENCE

1. **Requirements for issue of licence.**—An applicant for a Glider Pilot's licence shall satisfy the following requirements :—

(a) *Age.*—He shall be not less than 16 years of age on the date of application ;

(b) *Medical Fitness.*—He shall produce on a prescribed proforma a certificate of physical fitness from a registered medical practitioner after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under Rule 39B ;

(c) *Knowledge.*—He shall pass an oral examination in the following subjects :—

(i) *Air Regulations.*—including flight rules and air traffic control practices and procedures and regulations concerning operation of glider;

(ii) *Air Navigation.*—elementary principles including elementary knowledge and use of aeronautical maps and charts, time, magnetism, compasses, navigational instruments fitted in gliders and visual navigation;

(iii) *Aviation Meteorology*–elementary aviation meteorology including significance of aerodrome meteorological observations and warnings; elementary knowledge in reading meteorological charts and of meteorological procedures relating to cross-country flights; salient features of Indian climatology;

(iv) *Aircraft & Instruments.*—including knowledge of aerodynamics and theory of flight; aircraft instruments; operating limitations, handling, care and preflight. The examination shall also include questions pertaining to the particular type of glider.

NOTE.—The examination shall be conducted by a board constituted and approved by the Director General.

(d) *Experience.*—He shall produce evidence of having satisfactorily completed as pilot of a glider not less than 10 hours of flight time of which not less than 5 hours shall be of solo flight time and not less than 75 take-offs and landings of which not less than 25 solo take-offs and landings in a glider shall have been completed within a period of 6 months immediately preceding the date of application for licence;

(e) *Skill.*—He shall have demonstrated his competency to the satisfaction of the Examiner by undergoing the following flying tests on the type of glider to which the application for licence relates and within a period of 6 months immediately preceding the date of application:

The Flying Tests shall include a preflight inspection, checks and ground handling of a glider take-off, climb, release of cable, turns, stalling, spinning and recovery; soaring landing and emergencies.

2. **Validity.**—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 24 months from the date of medical examination, if the applicant is below 38 years of age and not exceeding 12 months from the date of successful medical examination, if the applicant is 38 years of age or above except when an applicant is medically examined for the renewal of his licence during 30 days immediately preceding the date of expiry of the licence, full period of validity, as applicable, may be allowed from the date of expiry.

3. **Renewal.**—The licence may be renewed on receipt of satisfactory evidence of the applicant—

(a) having undergone a medical examination in accordance with clause (b) of paragraph 1;

(b) having satisfactorily completed not less than 3 hours of flight time or 20 take-offs and landings as Pilot-in-Command of a glider within a period of 6 months immediately preceding the date of application for renewal or in lieu thereof having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 within the same period.

4. **Ratings.**—(a) *Aircraft Rating.*—The licence shall indicate the type of gliders the holder is entitled to fly. An open rating to fly all gliders having an all-up weight not exceeding 600 kgs. may also be granted to a glider pilot who has satisfactorily completed on a glider not less than 50 hours of flight as Pilot-in-Command in free flight including not less than 200 take-offs and landings as sole manipulator of the controls;

(b) *Aero-tow Rating.*—Aero-tow Rating entitles the holder to carry passengers in gliders in aero-tow flights. An Aero-tow Rating may be given if a glider pilot has satisfactorily completed in a glider not less than 10 aero-tow flights, of a total duration of not less than 2 hours as pilot of a glider provided that no solo aero-tow flights are undertaken, unless at least 5 dual aero-tow flights have been carried out with a qualified Instructor on board and a satisfactory report obtained;

(c) *Instructor's Rating.*—Instructor's Rating entitles the holder to impart instructions on gliders. Conditions for issue of this rating are laid down in Section L.

5. **Extension of Aircraft Rating.**—For extension of Aircraft Rating to include an additional type of glider, the applicant shall be required to produce evidence of having satisfactorily carried out on that type of glider not less than 3 take-offs and landings as Pilot-in-Command and as sole manipulator of the controls; having passed an oral examination in aircraft and instruments as mentioned in clause (c) of paragraph 1 and having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 in respect of the types of the glider for which the Aircraft Rating is desired. The flying test shall have been completed within a period of 6 months immediately preceding the date of application for extension of the Aircraft Rating.

6. **Privileges.**—Subject to the validity of endorsements and ratings in the licence, the privileges of the holder of a Glider Pilot's licence shall be to act as Pilot-in-Command of any glider and to carry passengers therein, under Visual Flight Rules provided that for all aero-tow flights he shall hold an Aero-tow Rating.

NOTE.—1. The privileges granted under this section shall be exercised only when the method of launching is any one of the following:—

Winch-launching,
Auto-launching, or
Launching by aero-tow.

2. If any unconventional method of launching, such as rockets, catapults, etc., is adopted, the privilege to fly in command and to carry passengers shall be exercised only after he has completed an approved course of training and a flying test to the satisfaction of the Director General.

SECTION K

Flight Instructors Rating (Gliders)

1. **Requirements for issue of Rating.**—An applicant for a Flight Instructor's Rating on Glider Pilot's licence shall satisfy the following requirements:—

(a) *Age.*—He shall be not less than 19 years of age on the date of application.

(b) *Knowledge.*—He shall pass a written and/or oral examination in the following subjects:—

(i) *Air Regulations.*—including general flight rules air traffic control practices and procedures and regulations concerning operation of gliders;

(ii) *Air navigation.*—elementary principles including elementary knowledge and use of aeronautical maps and charts; time, magnetism, compasses, navigational instruments fitted in gliders and the principle of triangle of velocities and visual navigation;

(iii) *Aviation Meteorology.*—elementary aviation meteorology including significance of aerodrome meteorological observations and warnings ; basic knowledge of aviation weather codes and plotting; elementry synoptic meteorology including simple interpretation of weather charts; elementary knowledge of Indian climatology and of meteorological procedure relating to aviation;

(iv) *Aircraft and Instruments.*—including knowledge of aerodynamics and theory of flight, general principles and elementary knowledge of design,

construction, maintenance and operation of gliders; operating limitations; handling, care and pre-flight inspection;

(c) *Experience*—.He shall produce evidence of having satisfactorily completed as a pilot of a glider:—

(i) not less than 50 hours of flight time as Pilot-in-Command including not less than 250 take-offs and landings provided that a person who has satisfactorily completed not less than 200 hours of flight time as Pilot-in-Command on an aeroplane shall be required to complete on a glider not less than 20 hours of flight time as Pilot-in-Command including not less than 100 take-offs and landings;

(ii) not less than 2 solo flights of not less than 2 hours duration each;

(iii) not less than 1 solo triangular cross-country flight of not less than 30 nautical miles distance in which no side of the triangle is less than 10 nautical miles;

(d) *Other Requirements.*—He shall have:

(i) An Aero-tow Rating;

(ii) Satisfactorily completed a Glider Instructor's Course approved by the Director General;

(e) *Skill.*—He shall demonstrate his competency as a Glider Pilot Instructor to the satisfaction of an examiner by undergoing the following flying tests by day within a period of 6 months immediately preceding the date of application for the rating;

The Flying Tests.—Shall include pre-flight briefing preflight inspection checks and ground handling of gliders, take-offs, climb and general flying; descent and glide; stalling, spinning and recovery, soaring landings, emergency manoeuvres and debriefing.

2. Validity.—The period of validity shall commence from the date of issue or renewal of Instructor's Rating. The rating shall be valid for a period not exceeding 12 months.

3. Renewal.—The Instructor's Rating may be renewed on receipt of evidence of the applicant having satisfactorily completed on a glider not less than 10 hours of flight time as an Instructor within a period of 12 months immediately preceding the date of application for renewal or in lieu thereof having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 within the same period.

4. Privileges.—Subject to the validity of endorsements and ratings in the Glider Pilot's licence, the privileges of the holder of an Instructor's Rating shall be:—

(a) to impart flying instructions on all gliders entered in the aircraft rating of the Glider Pilot's licence;

(b) to supervise and authorise solo flights by student Glider Pilots.

SECTION L

Private Helicopter Pilot's Licence

1. Requirements for issue of licence.—An applicant for a Private Helicopter Pilot's licence shall satisfy the following requirements:—

(a) *Age.*—He shall be not less than 17 years of age on the date of application;

(b) *Medical Fitness.*—He shall produce on a prescribed *pre-forma* a certificate of physical fitness from a registered medical practitioner after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under Rule 39B;

(c) *Knowledge.*—He shall pass a written examination in the following subjects :—

(i) *Air Regulations.*—Including flight rules, air traffic control practices and procedures and regulations concerning operation of aircraft ;

(ii) *Air Navigation.*–Elementary principles including elementary knowledge and use of aeronautical maps and charts, time magnetic compasses, simple navigational instruments, radio aids, visual and D. R. Navigation and simple flight planning ;

(iii) *Aviation Meteorology.*—elementary aviation meteorology including significance of aerodrome meteorological observations and warnings; elementary knowledge in reading meteorological charts and of meteorological procedures relating to cross-country flights ; salient features of Indian climatology ;

(iv) *Aircraft and Engines.*—including elementary knowledge of aerodyanamics and theory of flight with particular reference to rotary wing aircraft, engines instruments and handling, care and pre-flight inspection. The examination shall also include questions pertaining to the class and the type of helicopter for which an aircraft rating is desired ;

(v) *Seamanship*—important abbreviations used in admiralty charts ; Regulations for preventing collisions at sea ; lights to be carried by ships and seaplanes ; Union system of Buoyage ; meaning of High Water (HW), Low Water (LW), Mean High Water Springs (MHWS), Mean High Water Neaps (MHWN), Mean Low Water Springs (MLWS), Mean Low Water Neaps (MLWN), and chart datum applicable only to aircraft rating to include amphibians and seaplanes ;

(d) *Experience.*—He shall produce evidence of having satisfactorily completed as a pilot on a helicopter not less than 40 hours of flight time, dual and solo which shall include :—

(i) not less than 15 hours of solo flight time, of which not less than 10 hours shall have been completed within a period of 12 months immediately preceding the date of application ;

(ii) not less than 5 hours of cross-country flight time as the sole occupant of helicopter, including a round-trip flight to an aerodrome not less than 25 nautical miles distance from the point of departure and including a landing at the aerodrome. This flight time may be included in the flight time required under sub-clause (i) :

Provided that a person who has satisfactorily completed not less than 300 hours of flight time as Pilot-in-Command of an aeroplane shall be required to complete on a helicopter not less than 20 hours of total flight time, dual and solo which shall include not less than 10 hours of solo flight time completed within a period of 12 months immediately preceding the date of application for a licence ;

(e) *Skill.*—he shall have demonstrated his competency to the satisfaction of the Examiner by undergoing the following flying tests by day on the type of helicopter to which the application for licence relates and within a period not exceeding 6 months immediately preceding the date of application :

The Flying tests.—shall include pre-flight inspection, ground handling, takeoffs, circuits and landing patterns, general flying, turns, hovering, etc., all normal and emergency manoeuvers appropriate to the type of helicopter used.

2. Validity.—The period of validity shall commence rom the date of issue or renewal of the licence. The icence shall be valid for a period not exceeding 24 months rom the date of medical examination, if the applicant is

below 38 years of age and not exceeding 12 months from the date of successful medical examination if the applicant is 38 years of age or above except when an applicant is medically examined for the renewal of his licence during 30 days immediately preceding the date of expiry of the licence full period of validity, as applicable, may be allowed from the date of expiry.

3. Renewal.—The licence may be renewed on receipt of satisfactory evidence of the applicant :—

(a) having undergone a medical examination in accordance with clause (b) of paragraph 1 ;

(b) having satisfactorily completed not less than 5 hours of flight time as Pilot-in-Command of a helicopter within a period of 6 months immediately preceding the date of application for renewal or in lieu thereof having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 within the same period.

4. Ratings :

(a) *Aircraft rating.*—The licence shall indicate the class and the types of helicopter the holder is entitled to fly ;

(*b*) *Night Rating.*—Night Rating entitles the holder to carry passengers at night. Conditions for the issue of this rating are as follows :—

(i) He must have completed not less than 50 hours of flight time as Pilot-in-Command of a helicopter and as sole manipulator of the controls, including not less than 10 take-offs and 10 landing patterns by night within a period of 6 months immediately preceding the date of application ;

(ii) He must have completed not less than 5 hours of dual instructions in night flying.

Note.—Night rating is valid only when the holder has within a period of 6 months immediately preceding the intended flight carried out 5 take-offs and 5 landings patterns by night as Pilot-in-Command of a helicopter.

5. **Extension of Aircraft Rating.**—For extension of the Air craft Rating to include an additional type of helicopter, an applicant shall be required to produce evidence of having passed a written examination in aircraft and engines as mentioned in clause (*c*) of paragraph 1 and having satisfactorily completed the flying tests as laid down in clause (*e*) of that paragraph on the type of helicopter for which extension of aircraft rating is desired. The flying test shall have been completed within a period of 6 months immediately preceding the date of application for extension of the aircraft rating.

6. **Privileges.**—Subject to the validity of endorsements and ratings in the licence, the privileges of the holder of a Private Helicopter Pilot's licence shall be to act, but not for remuneration as Pilot-in-Command or as a Co-Pilot of any helicopter which is entered in the aircraft rating of his licence and carry passengers therein :

Provided that no flight is undertaken for hire or remuneration of any kind whatever ;

Provided further that passengers are carried by night only with a valid night rating.

Provided further that all flights are undertaken under Visual Flight Rules.

SECTION M

Commercial Helicopter Pilot's Licence

1. **Requirements for issue of licence.**—An applicant for a Commercial Helicopter Pilot's licence shall satisfy the following requirements :—

(*a*) *Age.*—He shall be not less than 18 years of age on the date of application.

(*b*) *Medical Fitness.*—He shall produce on a prescribed proforma a certificate of physical fitness from an

approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under Rule 39B;

(*c*) *Knowledge.*—He shall pass a written examination in the following subjects:—

(*i*) *Air Regulations.*—including general flight rules, air traffic control practices and procedures and regulations concerning operation of aircraft; Knowledge of communication and navigation facilities; aerodromes, search and rescue; rules concerning air transit, customs and health;

(*ii*) *Air Navigation.*—elementary knowledge of theoretial and practical air navigation including knowledge and use of aeronautical maps and charts, simple projections, time, magnetism, compasses, navigational instruments, radio and radar aids, visual and D. R. navigation, plotting and flight planning;

(*iii*) *Aviation Meteorology.*— elementary aviation meteorology including significance of aerodrome meteorological observations and warnings, basic knowledge of aviation weather codes and plotting elementary synoptic meteorology including simple interpretation of weather charts; elementary knowledge of Indian climatology and of meteorological procedures relating to aviation;

(*iv*) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flight with particular reference to rotary wing aircraft, general principles and elementary knowledge of design, construction, maintenance and operation of aircraft, engine and instruments; ancillary systems (e.g. fuel, hydraulic, etc.) and emergency systems, installation and equipment; basic knowledge of fuel and lubricants; loading of aircraft, weight distribution and its effect on flight characteristics. operating limitations,

handling, care and preflight inspection. The examination shall also include questions pertaining to the class and the type of helicopter for which a helicopter rating is desired.

(*v*) *Signals* (*Practical*).—transmission and interpretation of aural and visual signals.

(*vi*) *Seamanship.*—important abbreviations used in Admiralty charts, Regulations for preventing collisions at sea ; lights to be carried by ships and seaplanes ; Uniform system of Buoyage ; A general knowledge of Tides ; Meaning of High Water (HW), Low Water (LW), Mean High Water Springs (MHWS), Mean High Water Neaps (MHWN), Mean Low Water Springs (MLWS), Mean Low Water Neaps (MLWN) and chart Datum applicable to aircraft rating to include amphibians and seaplanes.

(*d*) *Experience.*—He shall produce evidence of having satisfactorily completed as a pilot of a helicopter not less than 100 hours of flight time which shall include—

(*i*) not less than 50 hours of flight time as Pilot-in-Command of a helicopter ;

(*ii*) not less than 10 hours of cross-country flight time as Pilot-in-Command of a helicopter ;

(*iii*) not less than 10 hours of flight time as Pilot-in-Command of a helicopter within a period of 6 months immediately preceding the date of application for licence : out of which not less than five hours of flight time by night as Pilot-in-Command of a helicopter which shall include not less than ten take-off and ten landing patterns by night;

Provided that a person who is the holder of professional pilot's licence and who has satisfactorily completed not less than 500 hours of flight time as Pilot-in-Command in an aeroplane shall be required to complete on a helicopter not less than 30 hours of flight time dual and solo. including

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not less than 20 hours of flight time, as Pilot-in-Command which shal nclude not less than 5 hours of cross-country flight time not less than 10 take-off and 10 landing patterns by night and not less than 5 hours of flight time within a period of 6 months immediately preceding the date of applicat on for licence

(*e*) *Skill.*—He shall have demonstrated his competency to the satisfaction of an Examiner by undergoing the following flying tests by day and by night on the type of helicopter to which an application for licence relates within a period of six months immediately preceding the date of such application:

The flying Tests.—shall include preflight inspection, ground handling, take-offs, circuits and landing patterns, general flying turns, hovering etc., all normal and emergency manoeuvres appropriate to the type of helicopter used.

2. *Validity.*—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 12 months from the date of medical examination if the applicant is below 38 years of age and not exceeding 6 months from the date of successful medical examination if the applicant is 38 years of age and above, except when an applicant is medically examined for the renewal of his licence during 30 days immediately preceding the date of expiry of the licence, full period of validity, as applicable may be allowed from the date of expiry.

3. *Renewal.*—The licence may be renewed on receipt of satisfactory evidence of the applicant:

(a) having undergone a medical examination in accordance with clause (b) of paragraph 1;

(b) having satisfactorily completed not less than 5 hours of flight time as Pilot-in-Command of a helicopter within a period of 6 months immediately preceding the date of application for renewal or in lieu thereof having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 within the same period.

4. *Ratings*:

(a) *Aircraft Rating.*—The licence shall indicate the class and the types of helicopters the holder is entitled to fly.

(b) *Instructor's Rating.*—Instructor's Rating entitles the holder to impart flying instruction on types of helicopter entered in the rating. Conditions for the issue of this rating are as follows:—

(i) He must have completed not lesss than 200 hours of flight time as Pilot-in-Command of a helicopter including not less than 20 hours of flight time by night; and

(ii) He must have undergone an approved course of training if required by the Director General.

5. *Extension of Aircraft Rating.*—For extension of the aircraft rating to include an additional type of helicopter, an applicant shall be required to produce evidence of having passed a written examination in aircraft and engines as mentioned in clause (c) of paragraph 1 and having satisfactorily completed the flying tests as laid down in clause (e) of paragraph 1 in respect of the type of helicopter for which the aircraft rating is desired. The flying test shall have been completed within a period of 6 months immediately preceding the date of application for extension of the aircraft rating:

6. *Privileges.*—Subject to the validity of endorsements and ratings in the licences, the privilegs of the holder of a Commercial Helicopter Pilot's licence, shall be to act as Pilot-in-Command or Co-pilot of any helicopter which is entered in the aircraft rating of his licence;

Provided that when passengers are to be carried at night, he shall have carried out within a period of 6 months immediately preceding the intended flight not less than 5 take-offs and 5 landing patterns by night as Pilot-in-Command of a helicopter.

Provided further that he shall not fly under Instrument Flight Rules:

Provided further that he shall have undergone satisfactorily appropriate proficiency checks within the preceding 6 months of any intended flight carrying passengers in respect of such types of helicopters entered in the aircraft rating of his licence and specified by the Director General.

SECTION N

STUDENT NAVIGATOR'S LICENCE

1. *Requirements for Issue of Licence.*—An applicant for a Student Navigator's Licence shall satisfy the following requirements:—

(a) *Age.*—He shall be not less than 20 years of age on the date of application;

(b) *Medical Fitness.*—He shall produce on a prescribed *pro forma* a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under Rule 39 B;

(c) *Knowledge.*—He shall pass a written examination with oral and practical tests in the following subjects:—

(i) *Air Regulations.*—including general flight rules, air traffic control practices and procedures and regulations concerning operation of aircraft: search and rescue, rules concerning air-transit, customs and health; knowledge of aerodromes, flight information regions, control zones, airways, comunication and navigational facilities; International Conventions of Air Navigation and international conferences and agreements.

(ii) *Air Navigation.*—including the form of the Earth, Maps and Charts—Definitions, units and formulæ used in air navigation; projections, aeronautial maps and charts—their consruction, properties and use;

Flight Navigation.—preflight planning and *en route* flight planning; keeping of navigation log, navigation by dead reckoning, by use of aeronautical maps by radio/radar and celestial observations; methods of pressure pattern navigation, grid navigation and navigation in higher latitudes and polar regions, tides and searches;

Instruments.—Magnetism; principles of construction and operation including calibration and use of instruments and compasses and the errors to which they are subject and where applicable the methods of correction;

Radio/Radar.—Knowledge and use of facilities, equipment and installations including procedures in current use for air navigation;

Astronomical Navigation.—Celestial sphere, definitions, movement of heavenly bodies and their selection and identification for the purpose of observation and reduction of sights; Use of aeronautical tables and air almanacs; Use of astro-navigation instruments and their errors;

(iii) *Aviation Meteorology*—intermediate aviation meteorology with special emphasis on atmospheric pressure, density, altimetry and upper wind circulations; knowledge of aviation weather codes and plotting; aircraft observation procedures; synoptic meteorology including simple analysis and interpretation of weather charts; principles of aerologation; elementary world climatology; detailed knowledge of Indian climatology and of meteorological procedures relating to aviation.

(iv) *Signals (Practical).*—transmission and interpretation of aural and visual signals.

2. Validity.—The period of validity shall commence from the date of issue or renewal of the licence. The Licence shall be valid for a period not exceeding 12 months from the date of a medical examination, except when a candidate has been medically examined during 30 days immediately preceding the date of expiry of the licence, full period of validity may be allowed from the date of expiry. The total period of validity in any case shall not exceed 24 months from the date of commencement of the exmination referred to in clause (c) of paragraph 1.

3. Renewal.—The licence may be renewed on receipt of satisfactory evidence of the applicant having undergone a medical exmination in accordance with clause (b) of paragraph 1 and subject to satisfactory exercise of privileges.

4. Privileges.—The privileges of the holder of a Student Navigator's Licence shall be to act as a Navigator on any flight, where a flight navigator is required to be carried in accordance with rule 38A provided that he shall so act at all times under the direct supervision of a licensed Flight Navigator and solely for the purposes of gaining practical experience in navigation to qualify for a Flight Navigator's Licence.

SECTION O

Flight Navigator's Licence

1. Requirements for issue of licence.—An applicant for a Flight Navigator's Licence shall satisfy the following requirements:—

(a) *Age.*—He shall be not less than 21 years of age on the date of application;

undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements, as notified by the Director General under rule 39 B;

(*c*) *Knowledge.*—He shall pass a written examination with oral and practical tests in the following subjects:—

(*i*) *Air Regulations.*—including general flight rules, air airtraffic control practices and procedures and regulations concerning operation of aircraft search and rescue, rule concerning air-transit, customs and health; knowledge of aerodromes, flight information regions, control zones, airways, communication and navigational facilities; international Conventions of Air Navigation and international conferences and agreements;

(*ii*) *Air Navigation.*—including

The Form of the Earth, Maps and Charts.—Definitions, units and formulæ used in air navigation; projections, aeronautical maps and charts—their construction, properties and use;

Flight Navigation.—Preflight planning; and en route flight planning; keeping of navigation log; navigation by dead reckoning, by use of aeronautical maps, by radio/radar and celestial observations; methods of pressure pattern navigation, grid navigation and navigation in higher latitudes and polar regions; tides and searches;

Instruments.—Magnetism; principles of construction and operation including calibration and use of instruments and compasses and the errors to which they are subject and where applicable the methods of correction;

Radio/Radar.—Knowledge and use of facilities, equipment and installations including procedures in current use for air navigation;

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Astronomical Navigation.—Celestial sphere, definitions, movement of heavenly bodies and their selection and identification for the purpose of observation and reduction of sights; Use of aeronautical tables and air almanacs; Use of astro-navigation instruments and their errors;

(*iii*) *Aviation Meteorology.*- intermediate avaition meteorology with special emphasis on atmospheric pressure, density, altimetry and upper wind circulations; knowledge of aviation weather codes and plotting; aircraft observation procedures, synoptic meteorology including simple analysis and interpretation of weather charts; principles of aerologation; elementary world climatology; detailed knowledge of Indian climatology and of meteorological procedures relating to aviation.

(*iv*) *Signals (Practical).*—transmission and interpretation of aural and visual signals;

(*d*) *Experience.*—He shall produce evidence of having satisfactorily completed within a period of 2 years immediately preceding the date of application the following air navigation experience as a Navigator :—

(*i*) not less than 200 hours of cross-country flight time of which not less than 100 hours including 50 hours by night shall have been completed on flights of not less than 1,000 nautical miles without landing or of at least 5 hours duration each during which he shall have navigated an aircraft by the use of dead reckoning, radio bearing and such other aids as may be available to him and shall have made 50 astronomical observations of heavenly bodies including not less than 25 by night and that he shall have appropriately and satisfactorily used the results of those observations in navigating an aircraft. Out of this flight time of 100 hours, not less than 50 hours including not less than 15 hours by night shall have been completed and out of these 50 astronomical observations, not less than 15 by day and 10

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by night shall have been made within a period of 12 months immediately preceding the date of application for licence;

(*ii*) the remainder of 200 hours as mentioned in sub-clause (i) shall have been completed on flights of not less than 3 hours duration each;

Provided that a pilot who has satisfactorily completed as a pilot-navigator on flights of not less than 3 hours duration each, at least 300 hours including not less than 50 hours by night shall not be required to produce evidence of experience required under this clause.

(*e*) *Skill.*—He shall demonstrate in flight by day and by night within a period of six months immediately preceding the date of application that he is competent to navigate an aircraft by dead reckoning, celestial and radio/radar observations:

2. Validity.—The period of validity shall commence from the date of issue or renewal of the licence. The Licence may be valid for a period not exceeding 12 months from the date of medical examination, except when a candidate has been medically examined during 30 days immediately preceding the date of expiry of the licence, full period of validity may be allowed from the date of the expiry.

3. Renewal.—The licence may be renewed on receipt of satisfactory evidence of applicant:

(*a*) having undergone a medical examination in accordance with clause (b) of paragraph 1;

(*b*) having completed as Flight Navigator not less than 20 hours of flight time during which he shall have navigated an aircraft by the use of dead reckoning, radio bearings and such other aids as are available to him and shall have made 10 astronomical observations of heavenly bodies and having appropriately used satisfactorily used the

results of those observations in navigating an aircraft within a period of 12 months immediately preceding the date of application for renewal, or in lieu thereof: having satisfactorily completed the tests as laid down in clause (c) of paragraph 1 within the same period.

4. Privileges.—The Privileges of the holder of a Flight Navigator's licence shall be to act as a Flight Navigator on any flight where a Flight Navigator is required to be carried in accordance with rule 38A.

SECTION P

STUDENT FLIGHT ENGINEER'S LICENCE

Requirements for the issue of licence.—An applicant for a Student Flight Engineer's Licence shall satisfy the following requirements:—

(*a*) *Age.*—He shall be not less than 21 years of age on the date of application.

(*b*) *Medical Fitness.*—He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements as notified by the Director General under rule 39B.

(*c*) *Knowledge.*—He shall pass a written examination on the following subjects:

(*i*) *Regulations and Procedure.*—including rules, regulations and procedure in force so far as duties of Flight Engineers are concerned;

(*ii*) *Aircraft and Engines.*—including elementary knowledge of aerodynamics and theory of flight, general principles of construction, maintenance and functioning of airframes, power plants and

installed equipment on aircraft (fuel hydraulic and electrical systems, etc.) normally requiring a Flight Engineer, type of fuel, refuelling procedure, preparation of reports illustrated by sketches if necessary describing replacement or repair required in the case of damage.

Note.—A candidate possessing AME's licence with appropriate aircraft rating may be exempted from the whole or part of the written examination at the discretion of the Director General.

(*d*) *Experience.*—He shall produce evidence of having satisfactorily completed:

a minimum of 3 years practical experience to the satisfaction of the Director General in maintenance and repair of aircraft and engines out of which 1 months shall have been in the maintenance and repair of multi-engine aircraft having engines rated at not less than 800 B. H. P. each; out of these 2 months, not less than 3 months shall have been spent on maintenance and repair of the type of aircraft which is desired to be included in the aircraft rating of his licence, within a period of 2 years immediately preceding the date of application:

OR

an approved course of training of at least two years duration in maintenance, repair and overhaul of aircraft and engines, out of which at least 6 months shall be in the maintenance and repair of multi-engine aircraft having engines rated at not less than 00 B. H P. each; out of these 6 months not less than 3 months shall have been spent on maintenance and repair of the type of aircraft which is desired to be included in the aircraft rating of his licence within a period of 2 years immediately preceding the date of application;

OR

not less than 200 hours of experience as Pilot-in-Command of a multi-engine aircraft with an all-up-weight of not less than 14,000 kgs, of any other multi-engine aircraft having a Flight Engineer's Station and in addition, he shall have spent not less than 3 months on maintenance and repair of the type of aircraft which is desired to be included in the aircraft rating of his licence within a period of two years immediately preceding the date of his application.

2. **Validity.**—The period of validity shall commence from the date of issue or renewal of the licence. The licence shall be valid for a period not exceeding 12 months from the date of medical examination.

3. **Renewal.**—Licence may be renewed for a period not exceeding 12 months from the date of a successful medical examination subject to the total validity of the licence not exceeding 24 months from the date of issue.

4. **Aircraft Rating.**—Licence shall indicate the types of aircraft on which the holder is entitled to fly in the capacity of a Student Flight Engineer.

5. **Extension of Aircraft Rating.**—For extension of the aircraft rating to include an additional type of aircraft an applicant shall be required to produce evidence of having passed a written examination in aircraft and engines as mentioned in clause (c) of paragraph 1 pertaining to the aircraft for which the extension of aircraft rating is desired and of having a minimum experience to the satisfaction of the Director General of Civil Aviation in duties on maintenance and repair of the type applied for during a period of 2 years immediately preceding the date of application.

6. **Privileges.**—Subject to the endorsements and ratings in the licence the privileges of the holder of a Student Flight Engineer's licence shall be to act as a Student Flight Engineer of any type of aircraft entered in

aircraft rating on his licence; and which has at separate Flight Engineers; Station provided that-

(a) he shall so act at all times under the personal supervision of a Flight Engineer and solely for the purpose of gaining flight experience required for obtaining a Flight Engineers' licence;

(b) he shall not act as a Student Flight Engineer of a transport aircraft carrying passengers, unless he has satisfactorily completed a course of training for a minimum of 10 hours on local training flights or non-passenger carrying flights, during which he shall have carried out not less than 10 take-offs and 10 landings and he has been certified fit by an Examiner to operate as a Student Flight Engineer on the type of transport aircraft carrying passengers. Out of the 10 hours stipulated as training experience, not more than 5 hours shall be on an approved synthetic device. Landings carried out on synthetic device shall not count towards the 10 landings referred to above.

SECTION Q

Flight Engineer's Licence

1. *Requirements for Issue of Licence.*– An applicant for a Flight Engineer's licence shall satisfy the following requirements:

(a) *Age.*—He shall be not less than 21 years of age on the date of application.

(b) *Medical Fitness.*—He shall produce on a prescribed proforma a certificate of physical fitness from an approved Medical Board after undergoing a medical examination during which he shall have established his medical fitness, on the basis of compliance with the requirement as notified by the Director General under rule 39-B.

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(c) *Knowledge*—He shall pass a written examination in the following subjects:—

(i) *Regulations and Procedure*—Including rules, regulations and procedure in so far as the duties of flight engineers are concerned.

(ii) *Aircraft and Engines.*—Various terms and definitions used in the operation of aircraft, general knowledge of aircraft operation, detailed knowledge of manuals of the type of aircraft to which the application relates; Methods of effecting in flight minor repairs, replacements and adjustments; aircraft performances with respect to speed limitations and the procedure to be followed in case of emergency particularly in the event of fire in air or power plant failure; flight planning based on loading and performance charts, fuel consumption and engine power curves, control of power output and mathematical computations involved General knowledge of varying meteorological conditions and their effect on power-plant operation and aircraft loading and C. G. computations.

(d) *Experience.*—An applicant shall produce evidence of having completed within a period of 12 months immediately preceding the date of the application for licence 50 hours of flying experience. Out of this flying experience not more than 10 hours shall have been obtained on an approved syanthetic flight trainer;

(e) *Skill.*—He shall have demonstrated his competency as a Flight Engineer to the satisfaction of an Examiner by undergoing the following tests on the type of aircraft to which the application for licence relates within a period not exceeding 6 months immediately preceding the date of such application:

The flight tests shall include handling, care and pre-flight inspection; practical knowledge of

emergency procedures and the ability to take appropriate action in the event of engine failure occurring particularly on take-offs and landings.

2. *Validity* —The period of validity shall commence from the date of issue or renewal of a licence. The licence shall be valid for a period not exceeding 12 months from the date of medical examination, except when an applicant has been medically examined during thirty days immediately preceding the date of expiry of the licence full period of validity may be allowed from the date of expiry.

3. *Renewal.*—The licence may be renewed on receipt of satisfactory evidence of an applicant;

(a) having undergone a successful medical examination in accordance with clause (b) of paragraph 1 above,

(b) having satisfactorily completed not less than 20 hours of flight time as a Flight Engineer within a period of 6 months immediately preceding the date of application for renewal or in lieu thereof; having completed flight tests as laid down in clause (c) of paragraph 1 within the same period.

4. *Aircraft Rating.*—The licence shall indicate the type (s) of aeroplanes the holder is entitled to fly in the capacity of a Flight Engineer.

5. *Extension of Aircraft Rating.*—For extension of aircraft rating to include an additional type of aircraft, an applicant shall be required to produce evidence of—

(a) having completed to the satisfaction of the Director General, a minimum experience of not less than 3 months on maintenance and repair of aircraft desired to be included in the aircraft rating of the licence within a period of 2 years immediately preceding the date of application;

(b) having passed a written examination in aircraft and engines as mentioned in clause (c) of paragraph 1;

(c) having successfully completed the flight tests as laid down in clause (e) of paragraph 1 in respect of the

type of the aircraft for which the aircraft rating is desired within a period of 6 months immediately preceding the date of application for extension of Aircraft Rating.

6. *Privileges*—Subject to the endorsements and ratings in the licence the privileges of the holder of a Flight Engineer's licence shall be to act as a Flight Engineer in any aircraft of a type specified in the Aircraft Rating of this licence.

SECTION R

Flight Radio Telephone Operator's Licence.

1. *Requirements for issue of licence.*—An applicant for a Flight Radio Telephone Operator's Licence shall satisfy the following requirements:—

(a) *Age.*—He shall be not less than 18 years of age on the date of application;

(b) *Medical fitness.*—He shall produce on a prescribed *pro forma* a certificate of physical fitness from either a registered medical practitioner or an approved medical board after undergoing a medical examination during which he shall have established his medical fitness, on the basis of compliance with the requirements as notified by the Director General under rule 39-B;

(c) *Knowledge.*—

(i) *Technical Qualifications.*—He shall produce a valid Radio Telephone Operator's (Restricted or General) Certificate endorsed for Aeromobile service issued or recognised by the Central Government under the Indian Wireless Telegraphy Rules, 1954;

(ii) *Other Requirement.*—He may be required to pass, at the discretion of the Director General a test to establish his knowledge of the current Aeromobile radio-telephone operating practices

and procedures, standards and recommended practices pertaining to air traffic control communication as promulgated by the Director General from time to time;

(d) *Experience.*—He shall produce satisfactory evidence of having completed not less than 2 months satisfactory experience as a Flight Radio Telephone Operator and obtained at least 10 hours' experience in flight during the preceding 12 months in an aircraft equipped with radio apparatus in accordance with rule 63;

Provided that an applicant who has not had the experience as required above may be granted a provisional licence for a period not exceeding one year in order to enable him to obtain the necessary experience;

Provided further that an applicant who is a licensed flight crew will not be required to produce evidence of experience.

(e) *Skill.*—He may, if so necessary, be subjected to a flight check as provided under rule 12 (.) of the Indian Wireless Telegraphy Rules, 1954, to establish his competency as a Flight Radio Telephone Operator.

2. *Validity.*—The period of validity shall commence from the date of issue or renewal of licence. The licence shall be valid for a period not exceeding 12 months from the date of medical examination except where an applicant is medically examined during 30 days preceding the date of expiry of licence, full period of validity may be allowed from the date of expiry subject to the validity of the Radio Telephone Operator's (Restricted or General) Certificate issued under the Indian Wireless Telegraphy Rules, 1954.

3. *Renewal.*--A licence will be renewed on production of satisfactory evidence of—

(a) having undergone a medical examination in accordance with clause (b) of paragraph 1;

(b) having a current Radio Telephone Operator's (Restricted or General) Certificate (Aeromobile Service)

issued or recognised by the Central Government under the Indian Wireless Telegraphy Rules, 1954.

4. *Privileges.*—Subject to the endorsements in the licence, the privileges of the holder of a Flight Radio Telephone Operator's licence shall be to act as a Flight Radio Telephone Operator on any aircraft equipped with radio apparatus in accordance with rule 63, except that the holder of a privisional licence shall at all times operate under the supervision of a person holding a Flight Radio Operator's or Flight Radio Telephone Operator's licence.

SECTION S

FLIGHT RADIO OPERATOR'S LICENCE

1. *Requirements for issue of licence.*—An applicant for a Flight Radio Operator's Licence shall satisfy the following requirements :—

(a) *Age.*—He shall be not less than 18 years of age on the date of application ;

(b) *Medical fitness.*—He shall produce on a prescribed *pro forma* a certificate of physical fitness from an approved medical board after undergoing a medical examination during which he shall have established his medical fitness on the basis of compliance with the requirements, as notified by the Director General under Rule 39-B ;

(c) *Knowledge.*—

(i) *Technical Qualifications.*—He shall produce a valid First Class Radio Telegraph Operator's Certificate endorsed for Aeromobile Service issued or recognised by the Central Government under the Indian Wireless Telegraphy Rules, 1954 ;

(ii) *Other Requirement.*—He may be required to pass, at the discretion of the Director General, a test to establish his knowledge of the current aeromobile radio telegraph/telephone operating

practices and procedures, standards and recommended practices partaining to air traffic control communication as promulgated by the Director General from time to time;

(d) *Experience.*—He shall produce satisfactory evidence of having completed not less than 4 months satisfactory experience as a Flight Radio Operator and obtained at least 25 hours' experience in flight during the preceding 12 months in an aircraft equipped with radio apparatus in accordance with Rule 63:

Provided that an applicant who has not had the experience as required may be granted a provisional licence for a period not exceeding one year in order to enable him to obtain the necessary experience.

(e) *Skill.*—He may, if so necessary, be subjected to a flight check as provided under rule 12(3) of the Indian Wireless Telegraphy Rules, 1954 to establish his competency as a Flight Radio Operator.

2. *Validity.*—The period of validity shall commence from the date of issue or renewal of licence. The licence shall be valid for a period not exceeding 12 months from the date of medical examination except where an applicant is medically examined during 30 days preceding the date of expiry of the licence, full period of validity may be allowed from the date of expiry subject to the validity of the First Class Radio Telegraph Operator's Certificate issued under the Indian Wireless Telegraphy Rules, 1954.

3. *Renewal.*—A licence will be renewed on production of satisfactory evidence of—

(*a*) having undergone a medical examination in accordance with clause (*b*) of paragraph 1;

(*b*) having a current First Class Radio Telegraph Operator's Certificate (Aeromobile Service) issued or recognised by the Central Government under the Indian Wireless Telegraphy Rules, 1954.

4. *Privileges.*—Subject to the endorsements in the licence, the privileges of the holder of a Flight Radio Operator's licence shall be to act as a Flight Radio Operator on any aircraft equipped with radio apparatus in accordance with Rule 83, except that the holder of a provisional licence shall at all times operate under the supervision of a person holding a Flight Radio Operator's licence.

20. In Schedule VI in the entry in the 2nd Column against S. No. 6 Log Books, for the figures "67", the following shall be substituted, namely :—

"67, 67A".

[No. F. 10-A/67-61/AR/AM (6).]

K GOPALAKRISHNAN, Dy. Secy.